Coins and Medals

INDIAN HISTORICAL RESEARCHES

COINS AND MEDALS

Their Place in History and Art

POOLE L.S.

Vol. 12



First Published 1917 This series 1987

Published by RANI KAPÖ∪Ř (Mrs) COSMO PUBLICATIONS 24-B, Ansari Road, Darya Ganj, New Delhi-110002 (India)

Printed at M/S Mehra Offset New Delhi



PREFACE.

HE present work is intended to furnish an answer to a question that is often and properly asked abou. 19 study of which the use and advantages are

not immediately obvious. In the following chapters we have attempted to show what coins can teach us; what is their value as documents of history and monuments of art; and what relations they bear to other branches of historical, artistic, and archaeological research. The book will be found of service to the antiquary and the collector of coins; but it is primarily intended for the general student who wishes to know what he may expect to learn from any particular branch of numissmatics.

The writers are all Officers or Affistants in the Department of Coins and Medals in the British Museum, except Professor Terrien de La Couperie and myself, who, however, have been entrusted with the task of preparing the Chinese and Mohammadan

Catalogues for the Department. A feries of effays which appeared in the *Antiquary* in 1883 forms the nucleus of the volume; but these have been revised and enlarged, while additional chapters and illustrations have been incorporated.

In the absence of any general guide to the study of coins, of a popular character, in the language, it is hoped that the present work may prove of value to many who have been accustomed to regard the science of numismatics as little better than a distraction.

STANLEY LANE-POOLE.

RICHMOND. Oct., 1884.





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COINS AND MEDALS.

CHAPTER I.

THE STUDY OF COINS.



F all antiquities coins are the smallest, yet, as a class, the most authoritative in record, and the widest in range. No history is so unbroken

as that which they tell; no geography fo complete; no art fo continuous in sequence, nor so broad in extent; no mythology so ample and so various. Unknown kings, and lost towns, forgotten divinities, and new schools of art, have here their authentic record. Individual character is illustrated, and the tendencies of races defined.

To be a good Greek numifinatist one must be an archaeologist; and it is a significant sact, that the only archaeological book of the last century which still holds its own is the *Doctrina Numorum Veterum* of Eckhel, now near its centenary. To

be a great general numifinatiff is beyond the powers of one man. Some may know Greek and Latin enough, with such mastery of English, French, German, and Italian as the modern commentaries demand, to begin the study of Greek and Roman money. Those who would enter the vast field of Oriental numismatics must be fortified with Arabic, Hebrew, Sanskrit, and Persian, befides adding Spanish and Russian to the other European languages still necessary for their work. Even they must pause beneath the Himalayas, nor dare to cross the Golden Chersonese, unless they are prepared to master the uncouth languages and intricate characters of the further East. a subject, and one needing such high training, has between Eckhel's time and ours attracted few great students. Coins have been used as helps by archaeologists; but the great numifmatist, who could master the richest provinces of the East or the West, or even both, and dignify his science as no longer fervile but mafterly, is of our contemporaries. Such was De Saulcy, who has but lately left us to lament how much remained untold by a mind fignally fruitful in giving forth its manifold treasures. He has had his rivals, and he has his followers, fome, like François Lenormant, who have already followed him, others, like Mommsen, still living to maintain the high position recovered for numifinatics.

Greek Coins. Thanks to their attractive beauty, and the skill of Eckhel, Greek coins have been best examined, and most carefully described; yet much remains

unknown and unrecorded. Besides the treasures we are constantly digging out of well-known collections, every year brings to light from under the earth coins of new kings or cities, coins with fresh types of divinities and representations of famous statues. Most of these works, whether familiar or new in type, have the charm which the great gift of the Hellenic race, artistic power ruled by measure and form, threw over all that it handled. Thus Greek coins are the grammar of Greek art. In them we may trace its gradual growth, the stern grandeur of the last days of archaism, and the fudden outburst of full splendour, more marked in coins, however, by the influence of the contemporaries and followers of Pheidias than by that of the great sculptor himself. While the original sculpture of this age, in marble and bronze, might be contained within the walls of a fingle museum, the coin-types may be counted by thousands. restorer has touched them, nor are they late copies, like the Latin translations of Greek originals which confuse the judge of statues. Small indeed they are; yet large in treatment, and beautiful in material, whether it be rich gold, or the fofter-toned electrum, or cold filver, or bronze glorified by the unconscious colouring of the earth in which the coins have lain for centuries. Sometimes we can fee the copy of a statue,—no fervile reproduction, but with fuch proof of free work in varieties of attitude as shows that the artist, strong in his power, was working from memory. Such is the Herakles of Croton, recalling a kindred

ftatue to the fo-called Thefeus of the Parthenon. Bolder masters took a theme like the winged goddess of Terina, and varied it with an originality which showed they were worthy peers of the sculptors and painters. Croton is a town with some place in history; but who, save a numismatist, has any thought for Terina, samous only for the survival of her exquisite coinage?

Schools of Art. While the sequence of styles is thus recorded, the study of coins unexpectedly reveals the existence of local schools; shows in the marked mannerism of the Italians, and still more of the Sicilians, that they worked under the influence of gem-engravers; while the strong central school of Greece was ruled by sculpture; the gentler and more sympathetic rival of Western Asia Minor obeyed the taste of painters; and the isolated Cretans, leading a simpler and less cultured life, expressed their feeling in a free naturalism. The larger schools again had their divisions, marking such local differences as those with which the study of mediæval Italian art has made us acquainted.

Portraits.

With the age of Alexander all art is centralized in royal capitals, and provincial feeling disappears. The great styles can still be traced in the money of the kings, the lofty naturalism of Lysippus, the dramatic force of the Pergamene masters, the theatrical tendency of their successors. This we see in royal portraits; while the decline and the commercial tendency of art is witnessed by the heraldic quality of the less important types.

The eye, dazzled with the beauty of Greek

money, is apt to take little heed of the knowledge lying beyond the province of art which is held within the narrow circle of a coin. Yet the mythological interest is only second to the artistic; and when the artist had lost his skill he produced those neglected pieces of inferior work, the Greek money of the Imperial age, which preserve the forms of famous temples, of great statues, and even of pictures otherwise finally lost to us.

The artists who engraved the Greek Imperial money, called to Rome, worked there for alien Mere copyists they were; yet more exact in portraiture, and better historians than their great predecessors. Too weak to be original. they were more faithful in rendering the present. To them we owe the marked lineaments of the earlier feries of Emperors, the cold Augustus; the coarse Vitellius; Trajan, the simple soldier; Roman Hadrian, the polite man of the world; and the philosophic Antoninus and Aurelius, with their wayward and luxurious wives. These engravers have left us a record of the art produced at Rome, and the art that was stored at Rome from the spoils of Greece, great buildings and famous statues, with here and there a subject foreshadowing in a new turn of style, of Roman birth, the future splendour of the Renaissance. But for history these men worked best, telling the story of the first two centuries and a half of the Empire with a fulness that has entitled their money to be called an Imperial Gazette. Thus while Hadrian was visiting the distant provinces, the Roman people,

when they went to market, saw in the new sestertii, the magnificent bronze currency, the portrayal of the movements of the distant Emperor.

The Middle Ages.

The transition from Roman to mediaeval money is not fudden. The one decays, and the other rises from its ruins, owing as much and as little to it as the architecture of the Middle Ages owed to that of the Empire—as much in form, as little in Here history divides with art the claim to our attention. At first the interest is centred in the gradual introduction of Roman money among the barbarian conquerors of the Empire; but by degrees the growth of art attracts us, and we watch the same process that marked the history of Greek coinage—the fame fuccession of styles, the fame peculiarities of local schools. But the art of the Middle Ages in the coins never rifes beyond the limits of decoration; and it is not till the classical Renaissance that we discover a worthy rivalry of the ancient masters. The beginning of medals is of the time, if not due to the genius, of Petrarch; and the earliest works are of his friends the Lords of Carrara; but it was not till the middle of the fifteenth century that the great medallic art of Italy had its true origin. of Verona, who glories in the name of painter, was at once the founder of the art, and by far its greatest master. His works are larger in size than the coins of antiquity and the Roman medallions, and are cast, not struck, in fine bronze. an inferiority to Greek money in the sense of beauty, the best Italian medals have a dignity of

Italian Medals. portraiture, and a felicity of composition, that places them in only the second rank, below the Greek works indeed, yet above the Roman. For if the Italian medallist had not the same sense of beauty, he had the power of idealizing portraiture, not with the view of elevating the physical so much as the moral qualities. Pisano, notably, represented a man with all the possibilities of excellence that lay within his compass; and thus he is the greatest of those medallists who worked in portraits.

Modern coins of the European states and their Modern colonies are the lowest in interest, and the medals of their great personages the least lively in portraiture. But they have an historic value that entitles them to a place in all representative collections, as at least useful illustrations of the contemporary annals, and the readiest means of bringing before the eye the chief sigures of the times. A closer study reveals new and curious facts, and the character of the king or the tendencies of the state receive an unexpected illustration.

Oriental money, of larger range and more in-Oriental dividuality than European, is worthy of more coins, attention than it has received. The great branch of Mohammedan coinage is invaluable for a period of history when written records are often wanting or little to be trusted. Its decorative art has a charm in the finest work of the Shahs of Persia and the Indian Emperors, but rarely is it more than a delicate rendering of an ornamental writing. The inscriptions give the coins their

true value, the dates and mints fixing the extent of a king's dominion, or recording the fact that he actually exercised the royal prerogative of coin-These legends have a bearing on the differences of race and faith, and even of literature and manners. The western Arabs coined their money with elaborate religious formulas, the heretical Khalifs of the race of 'Aly used mystical inscriptions, the Persians, the Indian Emperors and the Afghans inscribed poetic couplets, hard to decipher, from the occasional difregard of the order of words, and difficult to interpret, from the high-flown phrases in which royalty turned the language well-called the Italian of the East. Despite the general absence of figures, the result of the law of the Koran, there are some notable exceptions, as in the Turkoman coinage of the age of the Crusades, and the famous zodiacal coins of Jehangir and his still stranger Bacchanalian money, on which we fee the emperor feated, holding the forbidden wine-cup in his hand.

Yet earlier in origin than the Mohammedan coinage, the native money of India has, like it, furvived to our time. Beginning with the interesting Indian coins of the Greek princes, the so-called Bactrian money, and the contemporary rude punch-marked square pieces of native origin, it passes into the gold currency of the Guptas with interesting mythological subjects, Greek, Roman, and Indian, including a representation of Buddha, and closes with the Sanskritic money of our own time. Beyond India, China and the

neighbouring lands have their money as unlike that of the rest of the world as all else in the Far East, valuable alone for history, and for it most valuable; and curious for the occasional departure from the forms which we associate with the idea of coined money.





CHAPTER II.

GREEK COINS.

Bullion Money.

ANY centuries before the invention of the art of coining, gold and filver in the East, and bronze in the West, in bullion form, had already supplanted

barter, the most primitive of all methods of buying and selling, when among pastoral peoples the ox and the sheep were the ordinary mediums of exchange. The very word pecunia is an evidence of this practice in Italy at a period which is probably recent in comparison with the time when values were estimated in cattle in Greece and the East.

The Invention of Coinage.

"So far as we have any knowledge," fays Herodotus,¹ "the Lydians were the first nation to introduce the use of gold and silver coin." This statement of the father of history must not, however, be accepted as finally settling the vexed question as to who were the inventors of coined money, for Strabo,² Aelian,⁸ and the Parian Chronicle, all agree in adopting the more commonly received tradition, that Pheidon, King of

1 i. 94. 2 viii. 6. 8 Var. Hift., xii, 10.

Argos, first struck silver coins in the island of Aegina. These two apparently contradictory affertions modern refearch tends to reconcile with one The one embodies the Afiatic, the other another. the European tradition; and the truth of the matter is that gold was first coined by the Lydians, in Asia Minor, in the seventh century before our era; and that filver was first struck in European Greece about the same time.

The earliest coins are simply bullets of metal, Earliest oval or bean-shaped, bearing on one side the signet Methods of Colning. of the state or of the community responsible for the purity of the metal and the exactness of the weight. Coins were at first stamped on one side only, the reverse showing merely the impress of the square-headed spike or anvil on which, after being weighed, the bullet of hot metal was placed with a pair of tongs and there held while a fecond workman adjusted upon it the engraved die. This done, a third man with a heavy hammer would come down upon it with all his might, and the coin would be produced, bearing on its face or obverse the seal of the issuer, and on the reverse only the mark of the anvil spike, an incuse This simple process was after a time improved upon by adding a fecond engraved die beneath the metal bullet, fo that a fingle blow of the fledge-hammer would provide the coin with a type, as it is called, in relief, on both The presence of the unengraved incuse square may therefore be accepted as an indication of high antiquity, and nearly all Greek

coins which are later than the age of the Persian wars bear a type on both fides.

Scientific Value of Greek Coins.

The chief scientific value of Greek coins lies in the fact that they are original documents, to which the experienced numifinatiff is generally able to affign an exact place in history. The feries of the coins of any one of the cities of Greece thus forms a continuous comment upon the history of the town, a comment which either confirms or refutes the testimony which has been handed down to us by ancient writers, or, where fuch testimony is altogether wanting, fupplies valuable evidence as to the material condition, the political changes, or the religious ideas of an interval of time which, but for fuch evidence, would have been a blank in the chart of the world's history.

Perhaps the most attractive fide of this enticing fludy lies in the elucidation of the meaning of the objects represented on coins, in other words, in the explanation of their types.

The history of the growth, bloom, and decay of Greek art may also be traced more completely on a feries of coins which extends over a period of close upon a thousand years than on any other class of ancient monuments.

Types.

Greek coin-types may be divided into two distinct classes: (a) Mythological or religious representations, and (b) portraits of historical perfons.

Religious Aspect.

From the earliest times down to the age of Alexander the Great the types of Greek coins are almost exclusively religious. However strange this

may feem at first, it is not difficult to explain. It must be borne in mind that when the enterprising and commercial Lydians first lighted upon the happy idea of stamping metal for general circulation, a guarantee of just weight and purity of metal would be the one condition required. Without fome really trustworthy warrant, what merchant would accept this new form of money for fuch and fuch a weight without placing it in the scales and weighing it according to ancient practice? In an age of universal religious belief, when the gods lived, as it were, among men, and when every transaction was ratified by solemn oath, as witness innumerable infcriptions from all parts of the Greek world, what more binding guarantee could be found than the invocation of one or other of those divinities most honoured and most dreaded in the district in which the coin was intended to circulate?

There is even good reason to think! that the Temple earliest coins were actually struck within the precincts of the temples, and under the direct auspices of the priefts; for in times of general infecurity by sea and land, the temples alone remained sacred and inviolate. Into the temple treasuries offerings of the precious metals poured from all parts. The prieftly colleges owned lands and houses, and were in the habit of letting them on leafe, so that rents. tithes, and offerings would all go to fill the treasure-house of the god. This accumulated mass of wealth was not left to lie idle in the

1 Prof. E. Curtius, Numismatic Chron., 1870, p. 92.

14 Religious Aspect of Greek Coins.

facred cheft, but was frequently lent out at interest in furtherance of any undertaking, fuch as the fending out of a colony, or the opening and working of a mine; anything, in fact, which might commend itself to the found judgment of the priests: and fo it may well have been that the temple funds would be put into circulation in the form of coin marked with some sacred symbol by which all men might know that it was the property of Zeus, or Apollo, or Artemis, or Aphrodite, as the case might be. Thus coins issued from a temple of Zeus would bear, as a fymbol, a thunderbolt or an eagle; the money of Apollo would be marked with a tripod or a lyre; that of Artemis with a stag or a wild boar; that of Aphrodite with a dove or a tortoife—a creature held facred to the goddess of Love, in some of whose temples even the wooden footstools were made in the form of tortoiles.

State Coinage. In this manner the origin of the stamps on current coin may be explained. But throughout the Greek world the civic powers almost everywhere stepped in at an early date, and took over to themselves the right of issuing the coin of the state. Nevertheless, care was always taken to preferve the only solid guarantee which commanded universal respect, and the name of the god continued to be invoked on the coin as the patron of the city. No mere king or tyrant, however absolute his rule, ever presumed to place his own essign on the current coin, for such a proceeding would, from old associations, have been regarded as little

fhort of facrilege. In some rare cases, indeed, the right of coinage would even seem to have been retained by the priests down to a comparatively late period; for coins exist, dating from the sourth century B.C., which were iffued from the famous temple of the Didymean Apollo, near Miletus, having on the obverse the head of Apollo laureate and with flowing hair; and on the reverse the lion, the symbol of the sun-god, and the inscription EΓ ΔΙΔΥΜΩΝ ΙΕΡΗ, "facred money of Didyma."

We will now felect a few of the almost innumerable examples of ancient coin-types in illustration of the religious fignification of the symbols which appear upon them.

First in importance comes the plentiful coinage Aegina. of the island of Aegina, issued according to tradition by Pheidon, King of Argos, probably in the sanctuary of Aphrodite, in Aegina, the first European mint. These coins bear the symbol of the goddess, a tortoise or turtle; and they were soon adopted far and wide, not only throughout Peloponnesus, but in most of the island states, as the one generally recognised circulating medium. When Pheidon first issued this new money, he is said to have dedicated and hung up in the temple of Hera, at Argos, specimens of the old cumbrous bronze and iron bars which had served the purpose of money before his time.

Passing from Aegina to Athens, we have now Athens. before us the very ancient coins which Solon struck when he inaugurated that great financial reform

which went by the name of the Seifachtheia, a measure of relief for the whose population of Attica, then overburdened by a weight of debt. By the new law then enacted (circ. B.C. 590), it was decreed that every man who owed one hundred Aeginetic drachms, the only coin then current, should be held exempt on the payment of one hundred of the new Attic drachms, which were struck of a considerably lighter weight than the old Aeginetic coins.

The type which Solon chose for the new Athenian coinage was, like all the types of early Greek money, purely religious. On the obverse we see the head of Athena, the protecting goddess of the city; and on the reverse her facred owl and olive-branch. These coins were popularly called owls, γλαῦκες, or maidens, κόραι, πάρθενοι. Aristophanes, who not unfrequently alludes to coins, mentions these famous owls in the following lines, where he promises his judges that if only they will give his play their suffrages, the owls of Laurium shall never fail them:

First, for more than anything each judge has this at heart, Never shall the Laureotic Owls from you depart, But shall in your houses dwell, and in your purses too Nestle close, and hatch a broad of little coins for you.

Delphi.

Passing now into Central Greece, let us pause for a moment at Delphi, the religious metropolis of the Dorian race. Delphi was essentially a temple-state, independent of the Phocian territory

1 Birds, 1106 (Kennedy).

in the midst of which it was situated. moreover, the principal feat of the facred Amphictyonic Council. Here were held the great Pythian Festivals, to which all who could afford it flocked from every part of the Hellenic world. The town of Delphi, which grew up at the foot of the temple of Apollo, on the fouthern slope of Parnassus, was in early times a member of the Phocian Convention; but as the temple increased in wealth and pressige, the Delphians claimed to be recognifed as an independent community; a claim which the Phocians always strenuously refisted, but which the people of Delphi succeeded at length in establishing. The town, however, as fuch, never rose to any political importance apart from the temple, upon which it was always de fatto a mere dependency.

As might be expected, the coins issued at Delphi are peculiarly temple coins; and were probably struck only on certain special occasions, such as the great Pythian Festivals, and the meetings, called Hulaia, of the Amphictyonic Council, when many strangers were staying in the town, and when money would consequently be in request in larger quantities than usual. At such times markets or fairs were held, called *wulatiles ayopai,* for the sale of all kinds of articles connected with the ceremonies and observances of the temple; and at these markets a coinage issued by the priesthood, which all alike might accept without fear of fraud, would be a great convenience.

The usual type of this Delphian temple money

was a ram's head; the ram, κάρνος, being the emblem of Apollo, καρνείος, the god of flocks and herds. There is also another emblem, which, although it is usually only an accessory symbol, and not a principal type, must not be passed over in silence, the dolphin (δελφίς). Here we have an allusion to another phase of the cultus of Apollo, who, as we read in the Homeric hymn to Apollo, once took the form of a dolphin when he guided the Cretan ship to Crissa, whence, after commanding the crew to burn their ship and erect an altar to him as Apollo Delphinios, he led them up to Delphi, and appointed them to be the first priests of his temple.

On another coin struck at Delphi we see the Pythian god seated on the sacred Omphalos, with his lyre and tripod beside him, and a laurel-branch over his shoulders; while around is the inscription AMΦIKTIONON, proving the coin to have been issued with the sanction of the Amphictyonic Council.

Bocotia.

In the coinage of the neighbouring territory of Boeotia, the most striking characteristic is that it is a so-called Federal Currency; that is to say, that the various Boeotian cities possessed from first to last sufficient cohesion to be able to agree upon a common type, which might serve to distinguish the Boeotian currency from that of other states. This is the more remarkable when we remember the sierce political seuds which from the earliest times divided Boeotia into several hostile camps.

¹ l. 390, segq.

Here then we have a clear proof that the Buckler, which is the type from the earliest times to the latest of all Boeotian money, is no mere political emblem, but a sacred symbol, which friends and foes alike could unite in reverencing; just as in mediæval times all Christians, however hostile to one another, and to whatever land they might belong, were ready to pay homage to the sign of the Cross. To what divinity this Boeotian shield especially belongs we do not know for certain, but the Theban Herakles has perhaps the best claim to it.

The cities of Boeotia, however, while they all agreed to accept the buckler as the distinctive badge of their money, nevertheless afferted their feparate and individual rights on the reverse side of their coins. On the obverse we here get uniformity, on the reverse variety, and yet among all the various types on the reverses of the coins of the Boeotian cities, there is not one which is not distinctly religious, whether it refer to the worship of Herakles or Dionysos at Thebes, to Poseidon at Haliartus, to Apollo as the sun-god at Tanagra, or to Aphrodite Melainis as a moon goddess at Thespiae. Sometimes the god himself is directly portrayed, fometimes his prefence is veiled under some symbolic form, as when the amphora or the wine-cup stands for Dionysos, the club for Herakles, the trident for Poseidon, the wheel for the rolling disk of the fun-god, and the crescent for the goddess of the moon.

Proceeding now northwards through Theffaly Thrace.

and Macedon, we come upon a region where filver money was coined in very early times, probably long before the Persian invasion, by the mining tribes who inhabited the mountainous district opposite the island of Thasos. Here again we find the same close connection between the religion of the people and the types of their coins. The subjects represented on the money of this northern land are Satyrs and Centaurs bearing off struggling nymphs, rudely but vigorously executed, in a style of art rather Asiatic than Hellenic.





SILVER COIN OF THASOS.

Such types as these bring before us the wild orgies which were held in the mountains of Phrygia and Thrace, in honour of the god Sabazius or Bacchus, whose mysterious oracle stood on the rugged and snow-capped height of Mount Pangaeum, while around, among the dark pine forests, clustered the village communities of the rude mining tribes who worked the rich veins of gold and silver with which the Pangaean range abounded.

Ephesus.

We will now take an example from Asia Minor, where we shall find the same invariable connection between the coinage and the local religious cultus.

The coins of the great city of Ephefus, "first

city of Asia," are from very early times marked with a bee on one fide, and a stag and palm-tree on the other. The hierarchy of the Ephesian Artemis confifted of a college of priests, at the head of which was a High Priest called Έσσήν (the king bee), the leader of the fwarm, while his attendant priestesses bore the name of Melissae or Bees: and however difficult it may be for us to feize the exact idea which was intended to be conveyed by this fymbol, there can be no doubt that it was one of the most distinctive emblems of the Ephesian goddess in her character of a goddess of The stag is a symbol which every reader of the Greek poets will at once recognise as belonging to Artemis, as is also the facred palm-tree, πρωτόγονος φοίνιξ, beneath which Leto was fabled to have brought forth Apollo and his fifter Artemis.

In the West, no less than in Greece and Asia, the Etruria. religious aspect of the coin-types is very striking. Thus on Etruscan coins we meet with the head of the gorgon Medusa and of Hades. Here, too, we see Cerberus and griffins and sphinxes and chimaeras, as well as the head of a priest or augur—types which are symbolical of those gloomy and fantastic ideas connected with death and the world of shades which were peculiarly characteristic of the strange uncanny beliefs of the Etruscans.

In the fertile and vine-growing Campania, on Campania. the other hand, the most frequent reverse type is a human-headed bull, a tauriform Chthonian divinity or Earth-god, worshipped very generally throughout

Southern Italy under the name of Dionysos Hebon; a god whose nature partook both of that of Hades and of Dionysos, and who was associated with a female divinity, resembling both Persephone and Ariadne, a personification of the eternal renewal of nature in the spring-time. The beautiful head of this goddess is the constant obverse type of the money of Neapolis (Naples).



SILVER COIN OF TARENTUM

Magna Graecia. Tarentum

In Magna Graecia the splendid series of the money of Tarentum offers the curious type of a naked youth riding on a dolphin. This is Taras, the founder of the first lapygian settlement on the Calabrian coast, who was said to have been miraculously saved from shipwreck by the intervention of his father Poseidon, who sent a dolphin, on whose back Taras was borne to the shore. Tarentum divine honours were paid to him as oekist or founder, and hence his presence on the The rider who appears on the reverse of the coins of Tarentum may be taken as an example of what is called an agonistic type, i.e., a commemoration on the state-money of victories in the games held at Tarentum in the hippodrome. All Greek games partook of a religious nature, and were held in honour of one or other of the gods:

Agonistic Types. at Olympia, for example, in honour of Zeus, at Delphi of Apollo, and at Tarentum probably of Poseidon.

Another, and a very remarkable early example Metaponof one of the agonistic types is furnished by a coin of Metapontum, in Southern Italy: on the reverse is the figure of the river Acheloüs in human form, but with the horns and ears of a bull, just as he is described by Sophocles, as ανδρείψ κύτα βούπρωρος; and around him is the inscription in archaic characters ΑΧΕΛΟΙΟ ΑΘΛΟΝ, showing that games were celebrated at Metapontum in honour of Acheloüs, king of all Greek rivers, and as such revered from the time of Homer onwards. The coins with this type were doubtless struck on the occasion of the sestional held in honour of Acheloüs, and may even have been distributed as prizes, αθλα, among the successful athletes.

At least one side of every Metapontine coin was always dedicated to Demeter, to whose especial favour was attributed the extraordinary fertility of the plain in which the city stood. The ear of corn was the recognised symbol of the worship of this goddess. On this ear of corn is often seen a locust, a bird, a field-mouse, or some other creature destructive to the crops, which was probably added to the main type as a sort of propitiation of the daemons of destruction, and the malescent influences in nature.

The Achelous on this interesting coin of Meta-Sicily. River-gods. pontum may ferve to introduce us to a whole

1 Trach, 12.

feries of river-gods as coin-types on the money of many of the towns of Sicily. River-worship would feem, indeed, judging from the coins, to have been especially prevalent in that island in the fifth century B.C., during which the Sicilian coasts were girdled by a chain of magnificent Greek cities, all, or nearly all, of which were shortly afterwards either destroyed by the Carthaginians, or delivered by the tyrants of Syracuse into the hands of a rapacious foreign soldiery.

In Sicily we fee the river Gelas at first as a rushing man-headed bull, and later as a beardless youth with horns sprouting from his forehead.



SILVER COIN OF GELA.

The Crimissus on a coin of Segesta takes at first the form of a dog, and later that of a hunter accompanied by two dogs. The Hipparis at Camarina is seen as a young horned head emerging from the midst of a circle of waves. The Hypsas at Selinus is a naked youth offering a libation at the altar of the god of health, in gratitude for the draining of the marsh, which had impeded the course of his stream, and for the cleansing and purisication of his waters. On the reverse of this coin we see Apollo and Artemis in a chariot, the former as alassing discharging his radiant arrows and

flaying the Pestilence as he slew the Python, while his sister Artemis stands beside him in her capacity of είλειθυια οτ σοωδίνα, for the plague had fallen heavily on the women too, ωστε καὶ τὰς γυναϊκας δυστοκεῦν.¹



SILVER COIN OF SELINUS.

From the cultus of rivers we may pass to that Water-of nymphs, of which we may again find examples among the beautiful coins of Sicily. One of the most charming of these representations is that of the nymph Camarina on a coin of that city, who is pictured riding on the back of a swan, half-slying, half-swimming across the waves of her own lake, as she holds with one hand the corner of her peplos or garment, which, filled by the breeze, serves the purpose of a fail.

More famous still is the fountain-nymph Arethusa, on a tetradrachm of Syracuse, a work which, in delicacy of treatment, and in the skilful adaptation of the subject to the space at the disposal of the artist, leaves nothing to be desired. On this coin the head of the nymph is seen facing the spectator—a true water-goddess—

With her rainbow locks Streaming among the ftreams;

¹ Diog. Lacrt., viii. 2, 70.

while dolphins are playing around her, darting and leaping about among the rich masses of her floating hair. The artist has here striven to convey the idea of the sweet waters of the fountain in the island of Ortygia rising out of the midst of the salt waves of the harbour of Syracuse, the salt sea being symbolized by the dolphins.

As in the case of the river-gods, the head of the nymph is on this coin accompanied by her name, $APE\ThetaO\Sigma A$.

Eagles devouring a Hare. Another Sicilian coin stands out as a truly powerful work. It is a filver coin of Agrigentum, on which two eagles are seen on a rocky height, the one screaming with uplisted head, the other with raised wings and head stretched downwards. The two birds stand side by side on the dead body of a hare, which they are about to tear in pieces. As a coin-type, such a subject seems hard to explain: perhaps it refers to some local myth long loss; but it is scarcely possible to conceive that the artist





SILVER COIN OF AGRIGENTUM.

who engraved the die had not ringing in his ears the grand chorus in the Agamemnon where Aeschylus depicts the "winged hounds of Zeus"

in just such a scene as the engraver, with equally imperishable touches, has handed down to us across the ages:

On lofty station, manifest to fight,
The bird kings to the navy kings appear,
One black, and one with hinder plumage white,
A hare with embryo young in evil hour
Amerced of future courses they devour.
Chant the dirge, uplift the wail,
But may the right prevail.¹

From the coinage of free and autonomous coinage of towns, we will now pass to that of Philip of Alexander Macedon, the founder of that vast monarchy the Great which was destined, in the hands of his fon and fuccesfor Alexander the Great, to spread the arms, the arts, the literature, and the civilization of Greece as far as the shores of the Caspian and the banks of the Indus and the Nile. But absolute as was the power of Philip and Alexander, these monarchs were still effentially Greek, and as Greeks they were careful never to place upon their money any effigy less august than that of fome one of the gods of Greece. Thus Philip, when he had united in his fingle hand the whole of northern Greece, and when he reorganized the currency of his empire, had recourse to the two great religious centres of Hellas, Delphi and Olympia, for the types of his gold and filver money. On the gold money appears the head of the Pythian Apollo, and on the filver that of the Olympian Zeus. The reverse types are in each case agonistic; that is to say, they com-

¹ Agam., 115 (Swanwick).

memorate in a general way Philip's fuccesses in the great Greek games, in which, we are told, it was his especial pride to be hailed as a victor. Pallas and her attendant, Victory, with Herakles and the Olympian Zeus, are the gods under whose auspices Alexander's gold and silver went forth from a hundred mints over the vast expanse of his heterogeneous empire. But, more than mortal as Alexander was conceived, and perhaps almost believed himself to be, never once during his lifetime was his own portrait feen upon his coins, though it had been the custom in the East, from the very foundation of the Persian monarchy which Alexander overthrew, for the great king to place his own effigy upon the royal Daric coins. What clearer proof can be required that none but religious subjects were at that time admissible on the coin?

Introduction of Portraiture.

But after the death of the great conqueror a change is noticeable, gradual at first, and then more marked, in the aspect of the international currency instituted by Alexander. The features of the god Herakles on the tetradrachms little by little lose their noble ideality, and assume an expression in which there is an evident striving on the part of the engraver towards an assimilation of the god to Alexander, now himself regarded as one of the immortals and the recipient of Divine honours.

Alexander's Successors.

The first real and distinct innovation was, however, made by Alexander's general, Lysimachus, when he became King of Thrace. The money of this monarch bears most unmistakably a portrait of the great Alexander—of Alexander, however, as a god—in the character which in his lifetime his flatterers had encouraged him to assume, of the son of the Lybian Ammon with the ram's horn over the ear. This was the first step towards the new fashion of placing the head of the. fovereign on the coin of the realm; but so antagonistic does this practice seem to have been to the religious susceptibilities even of this late time, that it was only by flow degrees that it came to be adopted. When the centre of gravity, fo to fpeak, of the Greek world was no longer to be found in Hellas, but in the various capitals of those semi-oriental monarchies which arose out of the ruins of the Persian empire, Alexandria, Antioch, and the rest, all Greece received an indelible taint of oriental fervility. In comparison with these new self-constituted Basileic and their descendants, Philip and Alexander stand forth as Hellenes of the old type. Only in such degenerate times did it become possible for a king to usurp on the coinage the place of honour referved of old for gods and religious emblems; nay, even to give themselves out as very gods, and to adopt such titles as Θεός έπιφανής or Nέος Διόνυσος.

The first of Alexander's successors who substituted his own portrait on coins for that of the deisied Alexander was Ptolemy Soter, the sounder of the dynasty which ruled Egypt for two centuries and a half. Both he and his queen, Berenice, were deified after their deaths, and appear with the title $\Theta \omega i$ on the money of their fon, Ptolemy Philadelphus; and the portrait of Ptolemy Soter was perpetuated from generation to generation on the coins of fuccessive rulers of Egypt down to the time of the Roman conquest, although not to the exclusion of other royal portraits.

Greek coins, from the age of Alexander onwards, possess an interest altogether different from that with which the money of the earlier ages inspires us. The interest of the præ-Alexandrine coins is twofold. In the first place, they illustrate local myths, and indirectly shed much light on the political revolutions of every corner of the Greek world; and in the fecond place, they are most valuable for the history of art in its various stages of development. The interest of the post-Alexandrine coins is that of a gallery of authentic portraits. "Here," fays Addison,1 "you see the Alexanders, Caefars, Pompeys, Trajans, and the whole catalogue of heroes who have, many of them, fo distinguished themselves from the rest of mankind, that we almost look upon them as another species. It is an agreeable amusement to compare in our own thoughts the face of a great man with the character that authors have given us of him, and to try if we can find out in his looks and features either the haughty, cruel, or merciful temper that discovers itself in the history of his actions."

Portraits - Among the finest portraits on Greek coins we Alexander.

¹ Dialogues upon the Ujefulness of Ancient Medals.

have space only to mention a few. First comes that of the great Alexander himself, on the coins of Lysimachus, idealized no doubt, but still the man in the likeness of a god. In many of these coins we may note the peculiarities recorded as characteristic of his statues by Lysippus, the slight twist in the neck and the ardent look in the eyes.

Then there is Demetrius Poliorcetes, the de-Demetrius stroyer of cities, that foldier of fortune, terrible in war, and luxurious in peace, whose beauty was fuch that Plutarch fays no painter could hit off a likeness. That historian compares him to Dionysos, and as Dionysos he appears on the coins, with the bull's horn of the god pointing up from out the

head. Another highly characteristic head is that of the Phileunuch Philetaerus, the founder of the dynasty of the Attalid Kings of Pergamus. Here, at last, is realism pure and simple. The huge fat face and vast expanse of cheek and lower jaw carry conviction to our minds that this is indeed a living portrait.

heavy locks of hair which fall about his fore-

To those who are familiar only with Greek art Realism. in its ideal stage, such faces as this of Philetaerus, with many others that might be cited (Prusias, King of Bithynia, for example), from among the various Greek regal coins, will be at first somewhat startling. We have become so thoroughly imbued with the ideal conceptions of godlike humanity perpetuated in Greek sculpture and its derivatives, that when we first take up one of these portrait-

coins of the third or fecond century B.C., we find it hard to perfuade ourselves that it is so far removed This or that uninspired from our own times. and commonplace face might well be that of a prosperous modern Englishman, were it not for the royal diadem and Greek infcription which defignate it as a King of Pontus or Bithynia, of Syria or of Egypt.

Mithradates.

Nevertheless, although an almost brutal realism is the rule in the period now under confideration. there are instances where the artist seems to have been inspired by his subject and carried away out of the real into the ideal. Thus the majority of the coins of the great Mithradates are probably unidealized portraits, fomewhat carelessly executed. of a man scarcely remarkable unless for a certain evil expression of tigerish cruelty. But there are others of this same monarch on which, it is true, the likeness is unmistakably preserved, but under what an altered aspect! Mithradates is here the hero, almost the god, and as we gaze at his head on these coins, with flying locks blown back as if by a strong wind, we can picture him standing in his victorious chariot holding well in hand his fixteen splendid steeds, and carrying off the prize; or as a runner, outstripping the swiftest deer, or performing some other of those wondrous feats of strength and agility of which we read. This type of the idealized Mithradatic head also occurs on coins of Ariarathes, a youthful fon of Mithradates, who was placed by his father on the throne of Cappadocia. The head, like that of Alexander,

was afterwards perpetuated on the money of various cities on the shores of the Euxine.



SILVER COIN WITH HEAD OF MITHRADATES.

We have space only to mention one other Cleopatra. portrait, that of the famous Cleopatra on a coin of Ascalon. This is certainly no ordinary face, and yet we look in vain for those charms which fascinated Caesar and ruined Antony. The eyes are wide open and eager, the nose prominent and flightly hooked, the mouth large and expressive, the hair modeftly dreffed and bound with the The evidence afforded by the royal diadem. coins, taken in conjunction with a passage of Plutarch, who fays that in beauty she was by no means superior to Octavia, leads us to the conclusion that Cleopatra's irresistible charm lay rather in her mental qualities and alluring manner, than in any mere outward beauty.

Quite apart from the intrinsic importance, Styles of mythological or historical, of the subjects repre-Chronofented on Greek coins, lies their value as illustra-Sequence. tions of the archaeology of art. Of all the remains of antiquity, statues, bronzes, terracottas, sictile vases, engraved gems, and coins, these last alone

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can, as a rule, be exactly dated. The political conditions and viciflitudes of the autonomous coinstriking states render it comparatively easy for us to spread out before our eyes the successive issues of each in chronological sequence. In the series of each town we may thus at once obtain a few definite landmarks, around which, by analogy of style, we shall have no great difficulty in grouping The characteristics of Greek the remaining coins. art, in the various phases which it passed through, we do not propose, nor indeed is this the place, to discuss. It will be sufficient to indicate the main chronological divisions or periods in which the coinage of the ancient world may be conveniently claffified. These are as follows:

- I. Circa B.c. 700-480. The Period of Archaic

 Art, which extends from
 the invention of the art
 of coining down to the
 time of the Persian
 Wars.
- II. " " 480-415. The Period of Tranfitional Art, from the Persian Wars to the siege of Syracuse by the Athenians.
- III. ", ", 415-336. The Period of Finest

 Art, from the Athenian expedition against Sicily, to the accession of Alexander the Great.

IV. Circa B.C. 336-280. The Period of Later
Fine Art, from the accession of Alexander to the death of Lysimachus.

V. " " 280-146. The Period of the Decline of Art, from the death of Lysimachus to the Roman conquest of Greece.

VI. ,, 146-27. The Period of continued Decline in Art, from the Roman conquest to the rise of the Roman Empire.

VII. B.C. 27—A.D. 268. The Period of Graeco-Roman Art, from the reign of Augustus to that of Gallienus.

It is almost always quite easy to determine to which of the above periods any given coin belongs; and as a rule it is possible to fix its date within the period with more or less precision, by comparing it in point of style with others of which the exact date is known. Even a small collection of well-chosen specimens thus mapped out in periods forms an epitome of the history of art such as no other class of ancient monuments can furnish. It is true that not all coin art is of the highest order for the age to which it belongs. Often, indeed, it is extremely faulty; but, good or bad, it is always instructive, because it is the

veritable handiwork of an artist working independently, and not of a mere copyist of older works. The artist may have been unknown, perhaps, even in his own day, beyond the narrow circle of his fellow-citizens; but he was none the less an artist who expressed to the best of his ability the ideas of his age and country, and he has handed down to all time, on the little disk of metal at his disposal, a specimen, on a small scale, of the art of the time in which he was at work.

Die Engravera,

There is good reason, moreover, to think that the persons employed to engrave the coin-dies were by no means always artists of inferior merit. During the period of the highest development of Greek art it is not unusual, especially in Magna Graecia and Sicily, to find the artist's name written at full length in minute characters on coins of particularly fine work; and it is in the last degree improbable that fuch a privilege would have been accorded to a mere mechanic or workman in the mint, however skilful he may have been. artists known to fame were (at least in the fourth century) entrusted with the engraving of the coins, is indeed proved by the fact that we find feveral cities entirely independent of one another having recourse to the same engraver for their money. For instance, Evaenetus, the engraver of the finest of those splendid medallions of Syracuse, bearing on one fide the head of Persephone crowned with corn-leaves, and on the other a victorious chariot, places his name also on coins of two other Sicilian cities, Camarina and Catana; and what is still

more remarkable, the Syracusan artist, EYO, appears also to have been employed by the mint of Elis in Peloponnesus.





SYRACUSAN MEDALLION.

In Magna Greacia also we note that an artist, by name Aristoxenus, signs coins both of Metapontum and Heracleia in Lucania; and another, who modestly signs himself Φ , works at the same time for the mints of Heracleia, Thurium, Pandosia, and Terina.

In Greece proper, artists' fignatures are of very rare occurrence; but of the town of Cydonia, in Crete, there is a coin with the legend in full NEYANTOΣ ΕΠΟΕΙ; and of Clazomenae, in Ionia, there is a well-known tetradrachm, with a magnificent head of Apollo facing, and the infeription ΘΕΟΔΟΤΟΣ ΕΠΟΕΙ.

Enough has been faid to show that in the period of finest art there were die-engravers whose reputation was not confined to a single town, artists of the higher order, whose signatures on the coin were a credit to the cities for which they worked. Unfortunately, not a single ancient writer has thought of recording the name of any one of

these great masters of the art of engraving. How, indeed, could they know that thousands of these. in their time infignificant, coins would outlast the grandest works of architecture, sculpture, and painting, and would go down from age to age, uninjured by the lapse of time, sole witnesses to the beauty of a long-forgotten popular belief, or to the glory of some splendid city whose very site is now a defert or a swamp? Yet we must not regret that the old Greek engravers worked without any idea of handing down either their own, or their city's, or their ruler's glory to posterity. they thought of these things, the coins would have furnished far less trustworthy evidence than they now do, and we should probably have had many ancient examples of medals like that famous piece of modern times which Napoleon I. ordered to be struck with the inscription, Frappée à Londres.

Magistrates' Names. Not to be confounded with artists' fignatures on coins are the names of the magistrates under whose authority the money was issued. All such names are usually written in large conspicuous characters intended to catch the eye, while the names of artists are often purposely concealed; and are indeed sometimes so small as to be hardly visible without a magnifying-glass. About the end of the fifth century B.C., at some towns, though not generally before the middle of the fourth, magistrates begin to place their signatures on the money. Sometimes we read their names at full length, sometimes in an abbreviated form or in monogram; while not unfrequently a symbol or signet stands

in place of the name. It is a matter of no small difficulty to distinguish such magistrates' signets in the field of a coin from religious symbols which are to be interpreted as referring more or less directly to the principal type. Thus, for instance, an ear of corn might refer to the worship of Demeter, or it might stand in the place of the name of a magistrate Demetrius. As a rule, all fuch fmall accessory symbols before the end of the fifth century have a religious motive; and the fame fymbol will be found very constantly accompanying the main type. But in later times, while the type remains constant, the symbol will be frequently varied. It must then be understood as the private seal of the magistrate entrusted with the supervision of the coinage. Unfortunately we know very little of the organization of the mints in the various cities of the ancient world. It has been proved that at some cities the chief magiftrate placed his name on the money issued during his tenure of office; thus, in Boeotia, the name of the illustrious Epaminondas occurs; and at Ephefus we find the names of feveral of the chief magistrates, who are mentioned as such by ancient writers or in inscriptions. This was not, however, the universal rule: at Athens, for instance, the names of the Archons are not found on the coins; and at some cities the high priest, and occasionally even a priestess, signs the municipal coinage.

Under the Roman Empire, from Augustus to Greek Imperial Coin-Gallienus, the Greek cities of Asia, and a few in age. Europe, were allowed to strike bronze money for local use. These late issues are very unattractive as works of art, and their study has been consequently much neglected. In some respects, however, they are even more instructive than the coins of an earlier age, which they often explain and illustrate. It is to these Greek Imperial coins, as they are called, that we must have recourse if we would know what local cults prevailed in the outlying provinces of the Roman Empire, and especially in what strange and uncouth guises the half-Greek peoples of Asia clothed their gods.

Only in this latest period do we find on the coinage actual copies of ancient sacred images of Asiatic divinities, such as that of the Ephesian Artemis, with stiff mummy-like body, half human, half bestial, with her many breasts. It is not to be questioned that many such monstrous statues existed in various parts of Greece, sacred relies of a barbarous age, and that on great festivals they were draped in gorgeous attire, and exhibited to public view; but Greek art, as long as it was a living art, shrank from the representation of such images, and always substituted for them the beautiful Greek ideal form of the divinity with which it was customary to identify them.

These Greek Imperial coins are also valuable as furnishing us with copies of famous statues of the great period of art, such as that of the chryselephantine Zeus of Pheidias at Olympia, the Aphrodite of Praxiteles at Cnidus, and many others; and they are particularly interesting for

the light which they shed upon the sacred games, Pythia, Didymeia, Actia, Cabeiria, and other local festivals and religious ceremonies, of which, but for our coins, little or nothing would have been known.





CHAPTER III.

ROMAN COINS.



HE coinage of Rome falls naturally into two great classes: (1) the Family or, as it is often miscalled, the Confular series, struck under the Re-

public; and (2) the Imperial feries, of the period of the Roman and Byzantine Emperors, from Augustus to the capture of Constantinople by the Turks in A.D. 1453.

Introduction of Coinage. The date of the first issue of a coinage at Rome is uncertain. The presence of roughly cast lumps of metal in treasure offered to divinities of fountains, mixed with large quantities of coins, seems to indicate that the first attempt at a metal currency at Rome consisted of rude lumps or ingots of copper of uncertain weight and size, called aes rude. These pieces are without any mark of authority, and could only have circulated by weight. The introduction of a coinage at Rome has by ancient authority been attributed to Servius Tullius, and he is said to have been "the first to mark copper pieces with the repre-

Ass mile

fentations of an ox or some other animal or fymbol." No coins of this remote period have, however, been preserved, and the tradition is doubtless without foundation. Confiderably later than the time of the Kings are those quadrilateral or brick-shaped pieces of copper, having on one or both fides a fymbol, from which they have been called aes fignatum. These pieces must have Aes Signabeen issued in considerable quantities, as they are not uncommon at the present time. They are of uncertain fizes and thickness, and were originally cast in large blocks, and afterwards divided into fmaller portions. Like the aes rude, these pieces must have circulated by weight. They appear to have been in use up to a late period, even after the coinage had passed into another stage. To these rough pieces there succeeded a much more regular coinage, circular in shape, called aes grave. Aes Grave. It confifted of a large copper coin, the as, the unit of the monetary system, and, being of a pound weight, called the as libralis, and of a number of fractional parts, called the femis (half), the triens (third), the quadrans (fourth), the fextans (fixth), and the uncia (twelfth). Multiples of the as were the dupondius (double as), the quincuffis (fiveas piece), and the decussis (ten-as piece); but these do not appear to have been issued at Rome, but only by the neighbouring cities, which adopted this heavy copper coinage. All the pieces of this new coinage are cast (not struck), in high relief, and without any kind of legend or inscription excepting the marks of value: for the as I, for

the semis S, and for the other divisions four, three, two, or one dot or knob. The type of the reverse, a prow, was the same throughout, but that of the obverse varied with each denomination. On the as was the double-headed Janus, to whom the first coinage was mythically attributed; on the femis the head of Jupiter, the protector of the Capitol; on the triens the head of Pallas, the protectress of Aeneas, or Minerva, the inventress of numbers; on the quadrans the head of Hercules, the tutelary genius of the farmyard, and thus in general the god of property and riches; on the fextans the head of Mercury, the god of traffic and commerce; and on the uncia the head of Roma, herself the tutelary goddess of the city. The weight of the as was nominally that of the Roman pound of 12 oz., but very few specimens extant come up to the full weight; they range generally from 11 to 9 oz. This may be the refult of a first reduction of a pound of copper from the condition of aes rude, or large quadrilateral pieces of metal, aes fignatum, circulating by weight, to the form of a real and fystematic currency.

The origin of this libral fystem is affigned by Mommsen to the decemvirs, and more particularly to the influence of the Lex Julia Papiria (B.C. 430), which ordered that fines should not be paid in cattle but in money. But in style and fabric the libral coinage cannot be of so early a date. Anyone accustomed to the study of numismatics can see at a glance that these coins bear no trace of

archaism, and cannot be imitations of types that originated in the fifth century. They belong rather to a time that corresponds with the fine period of Greek coinage. The Romans borrowed all their ideas of painting and sculpture from the Greeks, and no doubt reforted to the same source for the types of their coinage. It must therefore be supposed that the sines ordered by the Lex Julia Papiria were paid in metal by weight, and that the as libralis was an eventual but not an immediate effect of this law.

Beside this rather complicated series of copper Early Gold coins, no attempt appears to have been made by and Silver Coincian the State to introduce either of the finer metals, at Rome. gold, or filver. In fixing the as to the weight of a pound, the State had, however, made it possible to accept in circulation the gold and filver coinages of neighbouring cities. At that period the pound of copper was worth a scruple of filver. a relative value which had for some time existed in Sicily, whose inhabitants for convenience of trade were desirous that their silver money and the rude copper coins of Latium should have a joint circulation. The coins that chiefly supplied Campanian this want were the gold and filver money of Cam-Coins pania, with the name ROMANO or ROMA. The gold coin had for the type of the obverse the head of Janus, and on the reverse two warriors taking an oath over a youth facrificing a pig.1 The filver coins vary in type, but the most common have on the obverse the head of Janus,

1 Caefa iungebant foedera porca.—Aen., viii. 641.

and on the reverse Jupiter in a biga, or two-horse chariot, accompanied by the divinity Victory. Both gold and silver coins of these types are inscribed ROMA. The relative value of the coins in gold, silver, and copper is a very difficult question. At this period the usual proportion between gold and silver was 1 to 12, and between silver and copper 1 to 250; but, in order to increase the value of their copper coins, the Romans appear to have estimated them above their usual worth, thus making the silver and copper at a ratio of 1 to 183, and reducing in an equal degree the ratio of the gold.

Reduction of the As Libralis.

Although this large copper coinage must have proved most inconvenient for commercial transactions, a confiderable period elapfed before there was any decided change in the Roman monetary fystem. The authorities of the Imperial age state with a very confiderable uniformity of opinion that the change took place during the period of the first Punic war (B.C. 264-241), and that the as libralis fell fuddenly to 2 oz., the weight of an as fextantalis. According to Mommsen, however, whose opinion is borne out by the coins themselves, the fall was not so rapid; and what took place appears to have been as follows. From a weight of 10 oz. (nominally 12), the as fell to 8 oz., and at length was reduced to 4, or to that of a triens, and thus became triental. This probably occurred about B.C. 269, when the filver coinage of Rome begins. The evidence afforded by the coinages of neighbouring cities subject to

Triental

Rome bear out this statement. In B.C. 291 Venusia was sounded, and struck coins of the libral standard; and in B.C. 289 Hatria sollowed her example; but in B.C. 251, when Lipara became a Roman colony, we find that city issuing a triental coinage. It is therefore between these dates that the reduction of the as must be placed, and in fixing it to B.C. 269 we make it simultaneous with the introduction of the new silver



SEXTANTAL AS.

coinage. The dupondius (2 asses), tressis (3), and decussis (10), were now issued at Rome, and also the semuncia ($\frac{1}{2}$ oz.) and quadruncia ($\frac{1}{4}$ oz.). These two last coins, together with the sextans and uncia, were now no longer cast but struck, and bore on the reverse the inscription ROMA; the other coins were all cast as before. The triental as did not long preserve its sull weight, but about B.C. 250 fell to 2 oz., and was called the as sex-Sextantal tantalis. When the coinage became sextantal, casting was abandoned, and all coins were struck, and bore the name of the city. Also the multiples

of the as were discontinued, as well as the semuncia and quadruncia.

First Roman Silver Coinage.

In B.C. 269 the first filver coinage was issued at Rome, and confifted of the denarius, its half the quinarius, and its quarter the sessertius. The legal weight of the early denarius was 4 scruples (72 grains), which gave a convenient number of scruples for each Roman coin. quinarius = 2 scruples, and the sestertius = 1 scruple, and the Roman pound of filver produced 72 denarii, 144 quinarii, or 288 sestertii. for adopting this new standard for the silver coins is obvious, when we confider what had happened with the copper coinage. This, as has been shown, was reduced to one-third its original value. and the new festertius was therefore an equivalent to the as libralis, of which many specimens must have still remained in circulation. In all indications of fums fixed at the period of the introduction of the new coinage, the Latin writers use as synonymous terms the words sesserius and aes grave. The relative value of filver and copper was by this arrangement maintained, although it did not long keep so, as the weight of the copper coins foon fell, and they became mere pieces of account or tokens, like the bronze coinage of the present day. In B.C. 217 the standard of the filver was reduced, and the as became uncial. The denarius was struck at 80 to the pound, and the quinarius The issue of the sestertius ceased, and was not again struck in silver, excepting at occafional intervals during the first century B.C.

quinarius, after a very short time, fell into disuse, and was only occasionally reissued. The denarius remained at this new standard for nearly three centuries, and maintained its purity throughout.

Another filver coin was also in circulation: this Victoriatus. was the victoriatus, fo-called from its type, which showed on the obverse the head of Jupiter, and on the reverse Victory crowning a trophy. This coin was first issued in B.C. 228; it was in weight 3 scruples, or three-fourths of the denarius, and was originally a Campanian coin; but after the fall of Capua, B.C. 211, the coinage of the Victoriatus was transferred to Rome, itself, where it continued to be coined for the use of the Provinces. It was also current at Rome, perhaps, however, to no great extent. When the weight of the denarius fell in B.C. 217, that of the victoriatus was reduced in like proportion, but after a few years its iffue ceased. The type was afterwards adopted for the quinarius.

When the as fell from sextantal to uncial, its uncial As. value was also changed from one-tenth to one-fixteenth of the denarius. As the soldiers were paid after the old standard of ten assess to the denarius, that coin retained its mark of value X. By this reduction the relation of silver to copper sell to 1 to 112, less than half the original ratio. Thus the copper coinage became still more a money of account; and when in B.C. 89 it was again reduced to a semuncial standard no ill-effects were produced. In B.C. 80 the copper coinage

ceased; and, excepting a few pieces struck in the eastern and western provinces, it was not revived during the period of the Republic. In B.C. 16 Augustus introduced a new copper coinage consisting of a sestertius of sour asses, a dupondius of two asses, an as, a semis, a triens, and a quadrans.

Gold Coins, after B.C. a60.

The only other pieces which remain to be mentioned are the gold. The early coins of 3, 2, and I scruple, marked Lx., xxxx., and xx., with the helmeted head of Mars on one fide and an eagle standing on a thunderbolt on the other, are usually considered a Campanian issue. These were first struck soon after B.C. 269; but from their extreme scarcity their issue could only have extended over a very short period. The first purely Roman gold money was struck by Sulla in B.C. 84-82. They bear his own name and that of his proquaestor, L. Manlius, and from their fabric appear to have been iffued in Greece, probably as rewards to his veterans. The gold coins struck by Julius Caesar in B.C. 49 are of the same character as those of Sulla; and it is not till after Cæsar's death that a gold coinage is firmly established, which confifted of an aureus and a balf-aureus, the former struck at forty to the pound, and representing in value twenty-five denarii.

Types.

The original type of the denarius is, on the obverse, the head of Roma wearing a helmet adorned with wings, and a griffin's head for the crest; behind is the mark of value X; and on the reverse, the Dioscuri on horseback, charging, their spears couched, their mantles stoating behind,

and their conical hats furmounted each by a star, emblematic of the morning and evening; below, is the inscription ROMA.





DENARIUS OF THE FIRST ISSUE.

This is no doubt a representation of these demigods as they were feen, according to the legend, fighting for the Romans at the battle of Lake Regillus. Any change of type was at first very After a time the mark of value is removed from behind the head of Roma and placed under her chin, and the infcription is transferred from the reverse to the obverse. About B.C. 125 the mark of value changes to **., and in one instance to XVI., the latter to represent fixteen asses, the true value of the denarius at that time. About B.C. 90 the mark of value is no longer stamped on the filver coins. The first instance of a change in the head on the obverse can be fixed with certainty to B.C. 100. In that year the Quaestors Piso and Caepio, having been ordered by the Senate to purchase corn and to fell it to the people below the market value, received a special privilege to issue coins to cover this extraordinary expenditure. To distinguish their coins from those struck by the officers of the mint, they varied the type by placing on the obverse the

head of Saturn, probably in allufion to L. Appuleius Saturninus, who had proposed the Lex Frumentaria. Seven years later, in B.C. 93, the monetarii issued two sets of coins having the same reverses: but on the obverse of one set was the head of Roma, and on the other that of Apollo. After this time the head on the obverse changed year by year, being either that of a divinity, fometimes but rarely of Roma, or of a traditional or historical personage. These types were generally in some way connected with the family of the monetarius. In B.C. 44, by order of the Senate, the head of Julius Caesar was placed upon the coins; and after a few years the usual type is that of some living personage, generally of him who issued the coins.

The first change in the type of the reverse occurred about B.C. 217, when Diana in a twohorsed chariot is substituted for the Dioscuri. But this was an exception, and it is not till after a further interval of more than fifty years that we again meet with any variation. From about B.c. 160 the coins show a delight in recording the great deeds of Rome's heroes in the past, in representing the mythological and historical traditions of the nation, and in illustrating public Historical events after the manner of medals. One of the earliest historical types is to be found on the coins, already referred to, of the Quaestors Piso and Caepio, who are represented distributing largesse to the public. A still more remarkable coin is that struck by Brutus after the murder of Julius Caesar, having on one side his own head, and on

and tra-ditional

the other a cap of Liberty between two daggers, and the inscription EID. MAR.



DENARIUS OF BRUTUS.

Brutus had already, when a monetary triumvir. recorded the famous deed of his ancestor L. Junius Brutus, the banisher of the Tarquins, by placing his head upon the coins. To the same class belong the coins of Sextus Pompeius, who for a time defied the efforts of Octavius to suppress his piratical excursions. These have on one side the pharos of Messana surmounted by a figure of Neptune, and on the other the monster Scylla, half-dog, half-fish, sweeping the sea with her rudder. They refer either to the defeat of Octavius at Messana in B.c. 38, or to the destruction of his fleet off the Lucanian promontory in the following year, on which occasion Pompeius offered facrifices to Neptune for his timely affiftance, and even styled himself the son of Neptune. Of the traditional types, perhaps one of the most interesting is that on a coin of the Postumia gens, with the bust of Diana on the obverse, and on the reverse a rock on which is a togated male figure before a lighted altar extending his hand towards a bull. It illustrates the worship of that goddess at Rome, to whom, for the use of the inhabitants of Latium, then under Roman rule, Servius Tullius

founded a temple on the Aventine. At their annual festival the augurs foretold the domination of Rome over all the Latin race, which was accomplished by Aulus Postumius at the battle of Lake Regillus B.C. 496. In consequence of this victory, the Postumia gens claimed for itself the fulfilment of the prophecy. On a coin of the Marcia gens are the heads of Numa Pompilius and Ancus Marcius, and a naked warrior (defultor) riding two horses; these allude to the traditional descent of the Marcia gens from Mamerces, fon of Numa, and the celebration of the games in honour of Apollo, which were instituted by the soothsayer Marcius. We have also such legendary subjects as Tarpeia crushed beneath the bucklers, Aeneas carrying Anchifes on his back and holding the Palladium, Ulysses returning from Troy and recognised by his dog, and the rape of the Still more numerous are the fimple Sabines. representations of the divinities of the Roman Pantheon.

The gold coins of Sulla and subsequent issues have types similar to those of the denarius. The copper coins of the reduced standard preserved their original types.

Moneyers' Marks and Names,

An important feature in the gradual development of the types is the moneyers' marks and names, which serve to indicate the successive issues from the mint. At first this mint officer only placed a symbol, a fly, cap, spear, or prow, to distinguish his iffue from those of previous years. Later on he added his initial, then his name, first in monogram

and finally in full, the prenomen on the reverse, and the cognomen on the obverse. These inscriptions are always in the nominative case. They cease about B.C. 36, when, after the deseat of Sextus Pompeius, and the submission of the triumvir Lepidus, amongst the many honours which Octavius received from the Senate, not the least was the commemoration of his victories in the types on the coins. To these was added his portrait, and from B.C. 29, when he was created Imperator, the coinage becomes imperial.

The right of issuing the coinage at Rome, as Constituelsewhere in all Republics, belonged to the State, Mint, Offiwhich fixed by decrees the standard and the cers, etc. various denominations. At an early period the duty of carrying into execution these regulations was delegated to three officers, who were called the tresviri auro, argento, aere, flando, feriundo. The word flando may show that these officers were nominated before the reduction of the as to the sextantal standard. The office certainly existed before the adoption of the uncial as in B.C. 217, as we begin to meet with the initials and monograms of the moneyers before that change took place. It was an occasional office at first, and appears only to have been filled up when fresh issues were needed for the use of the State. About B.C. 104, the more frequent occurrence of the moneyers' names shows that these officers were then appointed at closer intervals. Julius Caesar increased the number of this magistracy to four, and these continued to be nominated annually till the dif-

fenfions caused by the second triumvirate. In B.C. 39 the office was quite suspended, and does not appear to have been reinstituted till B.C. 16. when Augustus, before his departure for Gaul, reappointed the quatuorviri. The office was abolished about the year B.C. 3, and the Roman coinage then entered on a new phase. According to law, each officer of the mint was independent of the other, and could iffue his coins separately or in conjunction with his colleagues. monetarii were not the only magistrates who could strike money. The urban quaestors, ediles, and practors were fometimes charged with extraordinary commissions; but these cases were exceptional, and generally in virtue of fome unufual expenditure. Such pieces were marked with a special formula, as Ex. S. C. (Ex Senatus Consulto), or S. C. (Senatus Consulto), formulas never used by the appointed monetarii. The curule regularly ediles were also occasionally all wed to strike coins to cover the expenses of the great public games.

Local Mints

Besides the coins issued in Rome, there were and Issues. others struck outside the city. These may be divided into two classes: the coinage of the neighbouring cities, and the monetae castrenses or nummi castrenses. It is evident from monograms and letters on certain pieces of rude fabric that a few cities, after they came under Roman jurisdiction, were allowed to retain the right of coinage. Amongst these places were Luceria, Canusium, Crotona, and Hatria. These coins were of the

fame standard as those struck at Rome. privilege appears to have ceased during the second Punic War, or shortly afterwards. The monetae castrenses or nummi castrenses are coins issued by the general for payment of his foldiers, whether as dictator, conful, proconful, or imperator. This right could be delegated by the commander to his quaestor or proquaestor, who usually added his own name, and in some instances placed it alone, without that of his superior officer. These coins circulated throughout the Republic with the State coinage, although the authority of the Senate was not usually inscribed on them. Finds in Spain, Cifalpine Gaul, and elsewhere, show that the nummi castrenses were struck as early as the middle of the fecond century B.C.; but their iffue was fuspended for a time after the outbreak of the Social War. They are again found in large quantities from the time of the Civil War between Pompey and Caefar till the death of Mark Antony. They may be classed under the following districts: Sicily, Spain, Africa, Gaul, the East, which includes Greece and Asia Minor, and Cyrenaica.

To the coins iffued extra muros belong those Oscan struck by the revolted Italian States during the Social or Marsic War. These are of the denarii class, and many bear the same types as the State coinage of the time, but they are of rude fabric. The greater portion have the inscriptions in the Oscan character, and bear the names of the leaders, Papius Mutilus, Pompaedius, Minius Jegius, and Numerius Cluen-

tius. Others, simply inscribed ITALIA, are easily recognisable as belonging to this class.

Classifica-

The coins of the Roman Republic may be classified in two ways, (1) by families, under the name of the gens to which the monetarius belonged, In large collections for or (2) chronologically. facility of reference, the arrangement under families is perhaps the more practicable, but by this system the historical interest of the coinage is almost entirely lost. There are a large number of pieces which have no moneyer's name, others with only a fymbol, a letter, or a monogram. arrangement by families, many of these coins would find no distinct place. By a chronological arrangement, each coin has its place, and we are able not only to trace the sequence of the coinage, and fee how the types gradually developed, but also to follow the extension of Roman domination, as it spread throughout Italy to the West, to the East, and onwards into Asia, and across the Mediterranean into Africa. The large feries of coins of Julius Caefar, Pompey, Brutus, Caffius, and the triumvirate, would teach us very little if arranged under the Julia, Pompeia, Junia, Cassia, Antonia, and Aemilia gentes. For affiftance in a chronological arrangement, we have the evidence afforded by the growth of the types, by history, and by the various finds. To this study Mommsen has given much attention, and the refults of his labours are embodied in his learned work on the Roman coinage.1 But more can be accomplished than

1 Geschichte des Römischen Munzwejens.

even Mommsen has done as regards a local classification, and this was done by the late Count de Salis, who arranged the Roman coins in the British Museum, both republican and imperial, in chronological and geographical order.

When Augustus in B.C. 3 abolished the office of Imperial the monetarii, he reserved to himself all rights connected with the gold and silver coinages, and these remained with all succeeding emperors. To the Senate, however, belonged the power of striking the copper money, and its authority was denoted by the letters S. C. (Senatus Consulto), which also served to distinguish the copper coins of Rome from those issued in the provinces.

The coinage in circulation in Rome from that time was-in gold, the aureus, of forty to the pound, and the half-aureus; in filver, the denarius, of eighty-four to the pound, and its half, the quinarius; and in copper, the festertius, of four affes, its half the dupondius, the as, the femis or half-as, the triens or one-third-as, and the quadrans or quarter-as. The aureus was worth twenty-five denarii, and the denarius fixteen asses. was nearly equal in weight and fize to the dupondius, but it was distinguished by being of red copper; whilst the festertius and the dupondius were of yellow brass or orichalcum, being a composition of copper and zinc. The earliest deteriorations in the Imperial coinage took place in the reigns of Nero and Caracalla; and in A.D. 215 the aureus was only the fiftieth of a pound, and the denarius became so debased that it contained

Argenteus. only 40 per cent. of pure filver. When Caracalla had thus corrupted the coinage, he introduced a new filver piece, called the argenteus Antoninianus, of fixty to fixty-four to the pound, which was worth a denarius and a half, and which foon became the principal coin of the Empire. This piece may be eafily diftinguished from the denarius

by its having the head of the emperor radiate and the buft of the empress upon a crescent or half-

moon.

From the reign of Caracalla to that of Diocletian the greatest disorder prevailed in the coinage, and the period of the fo-called Thirty Tyrants was one of complete bankruptcy to the State. Each Emperor debased the coinage more and more, so that the intrinsic value of the filver currency was not one-twentieth part of its nominal value. argenteus supplanted the denarius, and after a short time, from a filver coin became only a copper one washed with a little tin; and, having driven the copper money out of currency, became itself the only piece in circulation with the exception of the gold. Diocletian, in A.D. 296, put an end to this confusion by withdrawing from circulation all the coinage, and issuing another entirely fresh one, based on the standard of the currency of the first century A.D. The aureus was struck at fixty to the pound, and a new coin in filver, called the cententionalis, took the place of the denarius; whilst in copper two new pieces were issued, called the follis and the denarius. Special interest is attached to this new coinage, as it affords the

Diocleian's Reforms.

means of explaining the prices marked in the great tariff of the Roman Empire which was published in A.D. 301, and which fixed the "maximum" price of almost every article of food or produce that found its way into the market. It was the abrogation of this tariff which occasioned a flight modification in the monetary system during the reign of Constantine, who reduced the weight of the aureus to seventy-two to the pound, and gave to this new coin the name of folidus in Latin The Solidus. and nomi/ma in Greek. This piece remained in circulation fo long as the Empire lasted, maintaining its full weight; and when current at a later period in Western Europe, it received the name of bezant or byzant. Constantine added two fresh filver coins to the currency, the miliarenfis, and its half, the filiqua, twelve of the former being equal in value to the folidus. Except some slight modifications in the copper money made by Anastasius and by Basil I., no further important changes remain to be mentioned.

The obverse of the Imperial coinage had for its Imperial type the head or bust of the Emperor, the Empress, Types, or the Caesar, and occasionally that of a near relative, such as the Emperor's mother or sister. The type varied with the period. In Pagan times the head or bust was laureate, i.e. bound with a wreath, or radiate, i.e. wearing a radiated crown, sometimes bare, but rarely helmeted; in the Christian and Byzantine period it is usually adorned with a diadem or a crested helmet. The portraits, too, may be divided into two classes,

realistic and conventional. The early Caesars, and their successors to Gallienus, fall under the first class, and the remaining Emperors, including the Christian and Byzantine, under the second. The types of the reverse are commonly mythological (divinities), allegorical (personifications), historical (events connected with the history and traditions of Rome), and architectural (the principal public



SESTERTIUS OF VESPASIAN.

buildings, especially those at Rome). On the coins of Vespasian and Titus is recorded the conquest of Judaea, figured as a woman seated weeping beneath a palm-tree, near which stands her conqueror, or else the serocious Simon, who headed the revolt and only survived to adorn the triumph of his enemies. On the large brass of Titus is to be seen a representation of the Flavian Amphitheatre, begun by his father and completed by himself, standing between the Meta Sudans and the Domus Aurea, with its many storeys or arcades, and its vast interior filled with spectators witnessing the magnificent dedication festival of a hundred days. The coins of Trajan record his conquest of Dacia, Armenia, Mesopotamia, and

his descent down the Euphrates and the Tigris to the Indian Ocean, the only Roman general who accomplished this feat. There are representations of the Forum, the most memorable of all Trajan's works: the Circus Maximus, which he embellished with the obelisk of Augustus; and the Aqua Trajana, by which he turned a portion of the pure and limpid Aqua Martia into the Aventine quarter of the city. The coins of Hadrian, besides bearing allegorical representations of divinities, countries, and cities, are of special interest as illustrating his extensive journeys into every Roman province, from Britain to the far East.

Such is the fuccession of types till the reign of Gallienus, when their interest slags, and for the most part we meet with badly executed representations of mythological personages.

The coins of the Christian Emperors differ much Christian in their character. At first the types are generally allegorical; and though free from Pagan intention are not without Pagan influence, as may be feen in the types of Victory inscribing the Emperor's vota on a shield, or two Victories holding a wreath, or the feated figures of Rome and Constantinople. Though the coins of Constantine the Great are of a somewhat Christian character, yet purely Christian types are at first unusual. After a while, however, Victory no longer holds a wreath, but stands grasping a cross, and in place of representations of some mythological personage we find the monogram of Christ formed of X and P. In the purely Byzantine period all the Pagan

influence disappears, and Christian types prevail, the most common being that of the Holy Cross raised high on steps.

Iconographic Types.

The coins of the later Emperors of the East are fpecially interesting for their iconographic types. Representations of a large number of facred figures are to be found upon them, and these representations are far superior in execution, and, therefore, of much greater value for the study of Christian iconography than any to be found on the mediaeval coins of Western Europe. The figures of Christ and the Virgin offer a variety of different attitudes. The former is most frequently feated, holding in one hand the gospels and with the other giving the Greek benediction. The Virgin is frequently feated: fometimes she holds in her arms the infant Saviour, fometimes she crowns the Emperor who ftands beside her, often with both hands raised in the attitude of prayer. In one very interesting type she stands amidst the walls of Constantinople. A number of Saints are also represented, among which may be cited St. George, St. Michael, St. Demetrius, St. Theodore, and (St.) Constantine the Great; also in one famous instance we see depicted the worship of the Magi.

Inscriptions. The inscriptions on the coins of the Pagan emperors are either descriptive, giving the Emperor's name and the date, partly on the obverse, and partly on the reverse; or else they are of a dedicatory nature, adding to the name of the Emperor a reference to the type. From Titus to Severus Alexander the chronological character of the in-

fcription is maintained, giving the current confulship of the Emperor, or his last consulship, and the year of his tribuneship; but in the latter half of the third century we meet with the Emperor's name alone on the obverse, and a dedicatory infcription on the reverse. Very little change occurs under the early Christian Emperors, except that the legend on the reverse loses its mythological character, and it is some time before the gradual transformation of the Roman State into the Eastern Empire is traceable in the coinage. Anastafius was the first who used Greek letters to indicate the value of the coins; yet although under Justinian I. the Greek language was much used by the people, it is not till the reign of Heraclius that the Greek legend EN TOYTO NIKA is found upon the coins. In the eighth century the Greek titles of Bafileus and Despotes make their first appearance in the place of Augustus, and under the Basilian dynasty Greek inscriptions occupy the field of the reverse of both filver and copper coins; but the reverse of the folidus retains its Latin form till the latter part of the eleventh century, when it is found for the last time on the coins of Michael VII., A.D. Alexius I. was the first Emperor who adopted entirely Greek legends for his coins, and after his accession Latin never appears again on the coinage of the Roman Empire, which now loses all trace of its Western origin, and becomes purely Byzantine. The most remarkable change in the coinage of the late Byzantine period was the introduction of concave pieces, scyphate nummi This

form was introduced as early as the close of the tenth century, but did not become the prevailing type of the gold, filver, and copper coinages till the end of the eleventh.

Local Mints

When the Roman Empire came under the fway of Augustus, the Roman monetary system was imposed as the official standard in financial business throughout the Empire, and no mint was allowed to exist without the imperial licence. This permission was, however, conceded to many Greek cities, which for the most part struck only copper coins; a few issued filver, but the only local mint of which gold coins are known is that of Caefarea in Cappadocia. These coins are usually designated Greek Imperial 1 Pure filver coins do not appear to have been iffued to any great extent; and, if we except the large filver pieces struck in the provinces of Asia, and usually called medallions, the local currencies in this metal may be faid to have ended with the reign of Nero, when the abundance of copper money placed the filver at a premium, and gradually drove it out of circulation.

The copper coinage of the Provinces had for the type of the obverse the head of the Emperor, etc., and for the reverse some mythological or historical subject: the inscriptions were always in Greek. In the second century the issues of this copper money increased very rapidly; but as the Roman denarius became more and more debased, and the local mints could no longer make a profit by issuing coins on any local standard, one city after

¹ Sce Cha; ter II., p ge 40.

the other gradually ceased to exercise the right of coining, and by the end of the reign of Gallienus almost the only provincial mint of importance remaining was that of Alexandria, which continued to iffue its coins till the reign of Diodrian Coinnecterian. This mint was able to hold out longer than the others, because it adopted the same tactics as the imperial mint at Rome: as the denarius became more and more debased, Alexandria, to keep pace, lowered the standard of all her coins, and the silver became potin, and the potin, copper.

Apart from these mints there existed from time to time others, which issued gold and silver coins after the Roman types and standard. It is probable that thefe coins were of the same nature as the nummi castrenses of the time of the Republic, their issue being superintended by the military or civil governors of the provinces. One of these mints was established at Antioch in the time of Vespasian and continued through the succeeding reigns to Gallienus Its coins, the aureus and denarius, are of a peculiarly rude fabric. The denarius was also struck at Ephesus during the reigns of Vespasian and Domitian. In the western part of the Empire Spain ftruck coins of the Roman standard and types in considerable numbers from the reign of Augustus to that of Titus, and in Gaul we find a large number of aurei issued during the same period. The coinages of Clodius Macer in Africa, of Clodius Albinus in Gaul, of Pacatianus, Regalianus, and Dryantilla at Siscia, and fimilar iffues, must be considered as exceptional and as having no legitimate authorisation.

When the base filver State coinage had driven the Greek Imperial copper coins out of circulation, Gallienus established local mints throughout the whole Empire, which struck money after the Roman types and standard. The number of these mints was further increased by Diocletian, and they continued to exercise their rights till the extinction of the Roman rule in the West and afterwards in the East. At first there was no indication on the coin that it was struck out of Rome; but Diocletian placed on all the coins, both of Rome and elsewhere, a monogram or initial letter of the city whence they were issued.

Medallions and Tickets. Besides coins proper, there are certain pieces in metal which resemble money in appearance, but which were never meant to pass as currency. These are the medallions, which correspond to medals of the present time, and the tickets, which served as passes to the public entertainments, etc.

The types of the medallions refemble those of the copper sestertius, having on one side the portrait of an imperial personage, and on the other some mythological, dedicatory, historical, or architectural subject, which more often than in the case of the coinage has some special reference to the imperial family. The size of the medallion is usually somewhat larger than that of the sestertius, and it is easily distinguished from the coins by the absence of the letters s.c., by its siner workmanship, and by being in high relies. These pieces were struck in

gold, filver, and especially copper. The filver and copper medallions were apparently first issued in the reign of Domitian; but the first gold specimen extant is of the reign of Diocletian, after whose time gold and filver medallions are more general than those of copper. The finest pieces were issued by Antoninus Pius, Marcus Aurelius, and Commodus; but the quality of the work was fairly maintained at a later period, when the coinage had much deteriorated in style and character. Even during the reigns of Constantine the Great and his successors, the execution of the medallions is throughout much superior to that of the current coins. It is probable that these pieces were all struck as honorary rewards or memorials, and were prefented by the Emperor to his troops or to those about the court. has been supposed that they were intended to be placed on the standards, because some are provided with deep outer rims, but this feems doubtful, as in all representations of standards on the column of Trajan and other buildings it may be feen that the medallions, with which they are adorned, have the bust of the Emperor facing, whereas on existing pieces it is always in profile.

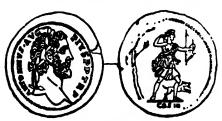
Of the tickets the most important are the contorniates, so called because they have the edge slightly turned over. These pieces are of copper, of the size of the sestertius, but somewhat thinner, and they have for types on one side some mythological, agonistic, or historical subject, relating to the public games or to the contests which took place for the honours of the amphitheatre, the

circus, the stadium, or the odeum; and on the other fide, a head or buft, imperial or regal, or of fome philosopher, author, or poet. The question of the object of these pieces, and the time when they were struck, has provoked much discussion, but these two points seem now to have been fairly fettled. It appears that they were made for presentation to the victors at the public games and contests, who used them as a kind of check, on the presentation of which at some appointed place and time they were awarded the allotted prizes; and, judging from the fabric, their issue appears to have begun in the reign of Constantine the Great, and to have been continued to about that of Anthemius, A.D. 464-472, that is, for a space of about ιςο years.

Medallíc Art.

In the massive and rude forms of the early coinage of Rome, bold in relief, and not without some knowledge of the laws of perspective, we fee illustrated the stern, hard character of the Roman, whose entire attention was given either to universal conquest abroad or to agricultural purfuits at home. Art to him possessed no charm; he was devoid of elegance and taste, and even the nobles prided themselves on their natural deficiency in matters of art, which they considered unworthy of a warlike and free people. This feeling, at the end of the fecond century B.C., became somewhat softened by the presence in Rome of the vast spoils of Greece, consisting chiefly of statues and paintings; and if the people still despised the practical cultivation of the arts, they were in general delighted with the beauty, or perhaps the novelty, of these acquisitions. This increasing taste for art may be traced in the types of the coins, which during the Republic acquire a pictorial character. If compared artistically with the earlier period, this may be called progressive.

With the Augustan age came a visible change, and Greek artists were encouraged to visit Rome, not only to adorn the temples of the gods, but also to embellish the villas of the rich, into many of which numerous original works from Greece, Asia, and Egypt had already found their way. As the taste increased, and it was impossible to furnish all with original Greek works, there arose a great demand for copies of the most famous and best-known objects. Inftances of these copies may be seen in the British Museum in such works as the Discobolus, which is supposed to be taken from a bronze figure by Myron; the Townley Venus, which, if not a work of the Macedonian period, may be a copy of one; and the Apollo Citharoedus, probably adapted from some celebrated original, since two other nearly fimilar figures exist. Though we cannot claim much originality for the Roman artists at this period, they are not mere fervile copyists; by a frequent modification of the original defign they give a stamp of individuality to their works. What has been faid of sculpture applies alike to medallic art, and the effect of this Greek influence is very marked on the coins of the Augustan age, and especially on those of the two Agrippinas, Caligula, and Claudius. The mythological figures which we meet with on these coins often strike us very forcibly as copies of Greek statues. Jupiter seated holding his thunderbolt and sceptre; Minerva leaning on her spear and shield ornamented with the serpent; Spes tripping lightly



MEDALLION OF ANTONINUS PIUS.

forward, holding a flower and gently raifing her dress; and Diana rushing onward in the chase, her bow in her outstretched hand, and her hound at her heels—are all representations of Greek subjects. The coins of Nero show the perfection which portraiture had attained, the growth of his passions being traceable in the increasing brutality of his features; whilst the coinages of Trajan, Hadrian, Antoninus Pius, and Aurelius display the highest state of Roman medallic art. With the decay of the Empire comes an immediate decline in the workmanship of the coinage; from Commodus to Diocletian it was one continued downward course. The coins of the early Christian Emperors show a slight artistic revival, and when, in later times, the artists of the West poured into Constantinople, carrying with them all that remained of artific life in the

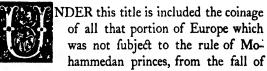
ancient world, they imported into the coinage that style of ornament so peculiarly Byzantine, the traces of which are still to be seen in the architecture of the Greek Church both in Europe and Asia.





CHAPTER IV.

THE COINAGE OF CHRISTIAN EUROPE.



the Western Empire to our own day. When we confider what vast fields of space and time are covered by this branch of numifinatics, it will be feen to be too large a fubject to be fully dealt with in a fingle chapter. The difficulty is found to be increased when we take into account how many different interests the study touches. The mere economist, the historian, the student of the history of art, and the student of Christian iconography, might each expect to have his enquiries answered were there an entire volume at our disposal. The only circumstance which makes it possible to deal with the subject briefly as a whole is the fortunate tendency which in all ages the different countries of Europe have shown to bring their coinage into some fort of common conformity.

Of this tendency we have plenty of examples in our own day, as, for instance, the practical uniformity which by the "Monetary Convention of the Latin Nations" was established in the coinages of Belgium, France, Switzerland, and Italy; in the recently-established uniformity of coinage throughout the German Empire; and in the inclination which the establishers of this coinage have shown to model their currency upon that of England. The fame kind of tendency among contemporary nations is to be detected throughout the numifmatics of the Middle Ages, and in truth by no means diminishes in force the further we retreat toward the beginnings of mediaeval history; a fact which will feem strange to those who are accustomed to look upon the Europe of these days as a mere collection of heterogeneous atoms, and its history as nothing better than a "scuffling of kites and crows."

It is thus possible in some degree to study the Division of the Subject. numifimatics of the Middle Ages, and of more modern times, as a whole; and in a very rough way to divide its history into certain periods, in each of which the most striking characteristics numifmatically and the most important events can be pointed out, without any attempt to follow in detail the history of the currency in each land. When in a subsequent chapter we come to speak of the English coinage, a more minute treatment of that special branch will be possible.

The periods into which I propose to divide the numismatic history of Christian Europe are these: Period I. Transition between the Roman and the true mediaeval: let us say, from the deposition of Romulus Augustulus (A.D. 476) to the accession of Charlemagne (A.D. 768).

Period II. From the rife of the new currency which was inaugurated by the house of Heristal, and which attained its full extension under Charles the Great, for all the time during which this currency formed practically the sole coinage of Western Europe.

Period III. From the re-introduction of a gold coinage into Western Europe, which we may date from the striking of the *Fiorino d'oro* in Florence, in 1252, to the sull development of Renaissance Art upon coins, about 1450.

Period IV. From this year, 1450, to the end of the Renaissance Era, in 1600.

Period V. That of modern coinage, from A.D. 1600 to our own day.

Special Points of Interest belonging to each Period. This division of our subject may serve at once to give the student some general notion of the sort of interest which pre-eminently attaches to the numismatics of each period. If he is concerned with the earliest history of the Teutonic invaders of Roman territory, with what may almost be called the *prehistoric* age of mediaeval history, he will be disposed to collect the coins which belong to our first division. The coins of the second period are of great value for the study of the true Middle Ages, not only as illustrations of that history, but for the light which they shed upon the mutual relations of the different nations of

Christendom, upon the economical history of this age, and laftly upon the iconography of this, the dominant, era of mediaeval Catholicism. coinage of the third period illustrates, among other things, the rife in wealth and importance of the Italian cities, the greater confideration which from this time forward began to attach to the pursuits of wealth and commerce, and a consequent growth of art and of intellectual culture. The coins of the fourth period, beside their deep historical interest for the portraits which they give us of the reigning fovereigns or rulers, are pre-eminent in beauty above those of any other of the five periods, and alone in any way comparable with the money of Ancient Greece. Finally, the fifth period will be most attractive to those whose historical studies have lain altogether in the age to which it belongs.

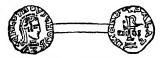
It is generally found that a monetary change PERIOD I. follows fome time after a great political revo-Augustulus to Charles People cannot immediately forego the magne. coinage they are used to, and even when this has no longer a raison d'être, it is still continued, or is imitated as nearly as possible. Thus, though from the beginning of the fifth century (A.D. 405) a steady stream of barbarian invasion set into the Roman Empire, from the Visigoths in the south and from the Suevi and Burgundians and their allies in the north (in Gaul), no immediate change in the coinage was the refult. The money of the Roman Empire in the West and in the East circulated among these barbarians, and was imitated as closely as possible by them. The new-comers

did not even venture to place their names upon the money; but the names of their Kings were fometimes suggested by obscure monograms. first coin which bears the name of any Teutonic conqueror is a small filver coin which shows the name of Odoacer (A.D. 476-490), and this piece is of great rarity. The Oftrogothic Kings in Italy, after the accession of Athalaric to the end of their rule (A.D. 526-553), and the Vandal Kings in Africa subsequent to Huneric (i.e. from A.D. 484-533), placed their names upon coins, but only upon those of the inferior metals. The full rights of a coinage can scarcely be claimed until the fovereign has ventured to iffue coins in the highest denomination in use in his territory. These full rights, therefore, belonged, among the people of the Transition Era, only to three of the conquering Teutonic nationalities: (1) to the Visigoths in Spain, (2) to the Franks in Gaul, and (3) to the Lombards in Italy.

The Visigothic coinage begins with Leovigild in 573, and ends with the fall of the Visigothic kingdom before the victorious Arabs at the battle of Guadaleta in 711. The coins are extremely rude, showing (generally) a bust upon one side, on the other either another bust or some form of cross. Three main types run throughout the series, which consists almost exclusively of a coinage in gold.

The Frankish coinage is likewise almost exclusively a gold currency. It begins with Theodebert, the Austrasian (A.D. 534), and, with unimportant

intervals, continues till the accession of the house of Pepin. At first the pieces were of the size of the Roman folidus (folidus aureus), but in latter years more generally of the fize of the tremissis. Below is a specimen of a Frankish tremissis, struck by Chlovis II. (A.D. 638-656), and with the name of his treasurer, St. Eloi. It is noticeable that in this series only a few pieces bear the names of the monarchs, while the rest have simply the names of the towns and the moneyers by whom they were struck.



COIN OF CHLOVIS II.

The Lombardic coinage of North Italy—of the Kings of Milan and Pavia—begins with Cunipert Colns of (A.D. 687), and ends with the defeat of Defiderius bards. by Charlemagne, 774, in which year the Frankish king assumed the crown of Lombardy. The coinage is generally of gold, and of the type of



COIN OF CUNIPERT (680-702).

the coin of Cunipert represented in the figure, showing on one side the bust of the King (imitated from the Roman money), and on the reverse the figure of St. Michael, legend scs MIHAHIL. This

faint was, we know, especially honoured by the Lombards. 1 Another Lombardic coinage was that of the Dukes of Beneventum, who struck pieces upon the model of the money of the Eastern Emperors.

The figure below represents the earliest papal coin, that struck by Pope Adrian I. after the defeat of Desiderius in A.D. 774.



COIN OF POPE ADRIAN I. (772-795).

Period.

The fecond age is the true Middle Age, or True Mediaeval what is sometimes called the Dark Age; for with the beginning of our third period, which it will be seen is nearly that of the last crusade, the first dawn of the Renaissance is discernible. It follows that in the scarcity of printed monuments of this age, the coinage of the period is one deserving of a very attentive study, and of a much more detailed treatment than I am able to bestow upon it.

> The coinage inaugurated by the house of Pepin has the peculiarity of being totally unlike any currency which preceded it. The three chief autonomous barbarian coinages which we have enumerated above confifted almost exclusively of gold money; the coinage inaugurated by the

¹ Paul Diac., Hift. Lang., iv. 47; v. 3, 41.

Carlovingian dynasty was almost exclusively of filver. Silver from this time forth, until the end of our fecond period, remained the fole regular medium of exchange; a gold coinage disappeared from Western Europe, and was only represented by fuch pieces as were imported thither from the east and the fouth. Such gold coins as were in use were the bezants or byzantii, i.e., the gold coins of the Roman Emperors of Constantinople, and (much less frequently) the maravedis, or gold coins struck in Spain by the Moorish dynasty of Al-Moravides (El-Murábitín). When Charles extended his Empire to its greatest limits, he introduced almost everywhere in Europe the new silver coinage, which was known as the new denier (novus denarius), or possibly in German as pfenning.1 This denarius was the first coinage of Germany. Italy it generally superfeded the Roman denarius, or the coinage of the Lombards.

The usual type of this New Denarius was at New first (1) simply the name or monogram of the Emperor, and on the reverse the name of the mint or a plain cross; (2) the bust of the Emperor, with a cross on the reverse; or (3) the bust of the Emperor on the obverse, and on the reverse a temple inscribed with the motto xpistiana religio. The pieces engraved on the next page, probably of Charles the Bald, are good examples of the earliest

1 Our word penny (orig. pending, pening) is equivalent to the Old High German Phantine, whence Pfenning, Pfenning, and is derived from the Anglo-Saxon pand (German Pfand), a pledge. So Sanders and Skeat; but F. Kluge (Etym. Wörterb., 1883) speaks doubtfully concerning the derivation of Pfennig.

types of denarii. One of the first documents referring to this coin is a capitulary of Pepin the Short (755), making its use compulsory in his dominions. In imitation of the new denarius, the penny was introduced into England by Offa, King of Mercia (757-794). The only exceptions to the general use of this denarius in Western Europe were afforded by those towns or princes in Italy which imitated the money of the Byzantine Empire.





CARLOVINGIAN DENARII.

This was the case with some of the earlier Popes, as is shown by the coin of Adrian I., represented on p. 80, which is quite Byzantine in type. Venice, which at first struck denarii of the Carlovingian pattern, after a short time changed this currency for one closely modelled upon the Byzantine pattern, while other neighbouring cities followed her example.

Mediaeval Coins of France. After the accession of the race of Capet to the throne in France, the denarii continued little

changed; and not only in the districts over which ruled the early kings of this dynasty, but over the greater part of what is now France. The number of feudal divisions into which the country was fplit up is shown by the numerous princes' names which appear upon the currency, but they did not cause much variety in the type of the money. The types continued to be various combinations of (1) an inscription over all the face of the coin; (2) a rude buft, fometimes fo degraded as to be barely distinguishable; (3) the conventional equallimbed cross; (4) a changed form of the temple, made to take the appearance of a Gothic arch between two towers. This type in its most altered shape has been sometimes taken for the groundplan of the fortifications of Tours.

In Germany, the Carlovingian Emperors were of Gerfucceeded by the Saxon dynasty, which in its turn gave place to that of Franconia. During all this period (A.D. 919-1125), the denarius continued the chief, and almost the sole, coin in use in Germany. Here, however, the variety of types was much greater, though most of these varieties may be shown to have sprung out of the old Carlovingian types. The right of coinage was at this time even more widely extended in Germany than in France; but in the former country the nominal supremacy of the Emperor was generally—though far from universally—acknowledged, and his name was placed upon the coinage.

In Italy, most of the towns which possessed the or many.
right of a coinage derived it directly from the

Emperor: thus Genoa obtained this right from Conrad III.; Venice (at first), Pisa, Pavia, Lucca, Milan, are among the cities which struck coins bearing the names of the early German Emperors.

The first change which took place in the coinage

of this our fecond period arose in Germany from the degradation of the currency. This reached fuch a pitch (especially in the ecclesiastical mints) that the filver denarius, of which the proper weight was about 24 English grains, was first reduced to Pfennige or a small piece not more than one-third of that weight, and next to a piece fo thin that it could only be stamped upon one fide. This new money, for fuch it was in fact, though not in name, arose about the time that the dynasty of Hohenstaufen

> obtained the imperial crown, that is to fay, in the middle of the twelfth century. The pieces were called subsequently Pfaffen - Pfennige (parson's pennies), because they were chiefly struck at ecclefiastical mints; they are now known to numif-

Beside the coinages of France, Germany, Italy, and England, we have also briefly to notice those of Scandinavia and of Spain, both of which were inaugurated during the fecond age of mediaeval numifinatics.

matists as bratteates.

Arabic Currency in the North.

It is a curious fact that in the north, during the ninth and tenth centuries, we find that a large number of the contemporary Arabic filver coins (dir bems) were current. It feems at first fight extraordinary that they should have travelled so far, but less strange when we bear in mind the extensive

Viking expeditions which took place during the fame period. As has been well faid by a recent writer,1 the Vikings gave a fort of reality to the popular notion that Christian Europe was an island; for, starting on one side to the west, they crept down all that coast of the continent until they reached the Straits of Gibraltar, and thence made their way into the Mediterranean, while on the other fide, mounting the rivers which emptied themselves into the Baltic-the Vistula or the Dvina-with but a few miles of land-carriage they brought their boats to the Dnieper, and by that route upon the eastern side stole down into the fame Mediterranean. It was in this way that the Vikings came in contact with the Arab merchants, and carried Arab money to the far North. happened that this filver coin, the dirhem, was in weight just double that of the denarius current in Europe. Carlovingian denarii, English pennies, and Arab dirhems were alike hoarded by the Norse pirates. It was not till the end of the tenth century that the Danes and Scandinavians began to make numerous imitations of the contemporary coinage of England. On the accession of Canute the Great to the English throne, A.D. 1016, a native currency obtained a firm footing in Denmark.

Between the battle of Guadaleta (A.D. 711) and Spain. the union of the crowns of Castile and Aragon (A.D. 1479), the Christian coinage of Spain was represented by the coins of these two kingdoms,

¹ Steenstrup: Normannerne, page 1.

the rest of the peninsula being in the hands of the Arabs or Moors. The coinage of Castile begins with Alfonso VI. (1073-1109); that of Aragon with Sancho Ramirez of Navarre (1063-1094). The money of these countries is a denarius of the same general module as the contemporary denarii of France. The usual types of these coins, as of all the contemporary coinage of Europe, consist of some combination of a profile head and a cross. Some pieces have a bust, facing.

lconography.

The best specimens of Christian iconography contained upon coins are to be found in the feries of Byzantine coins. Of these mention has been already made. In Italy we have S. Michael on the coins of the Lombards; S. Peter on the Papal money; S. Mark on that of Venice; and S. John upon the coinage of Florence. The Virgin and Child appear on the copper coins of the Norman Kings of Sicily, and S. Matthew on those of the Norman Dukes of Apulia. The Sanctus Vultus or holy icon of Christ, still preserved at Lucca, is represented on the money of that town. the denarii of Germany and the Low Countries the iconographic types are also numerous, but the representation of the persons is very rude. Besides the symbols of the Three Persons of the Trinity—the Hand, the Cross, and the Dove -the fecond universal, the third comparatively rare—we fee reprefentations of numerous faints, each on the money of the town of which he was the special patron. Thus we have S. Lambert for Liège and Maestricht, S. Servatius for Maestricht, S. Martin for Utrecht, S. Remachus (Stablo), S. Maurice (Magdeburg), S. Charlemagne (Aix la Chapelle), S. Boniface (Fulda), S. Kilian (Würzburg), S. Stephen (Metz and other places in Lorraine), SS. Simon and Jude (Magdeburg, Goslar), S. Peter (Lorraine, Toul, Cologne, Berg, Trèves, etc.), the Virgin (Lower Lorraine, Huy, Hildesheim, Spier, Augsburg).

On the coins of France facred types and fymbols, excepting the crofs, which is all but univerfal, are lefs frequent during this age. The head of the Virgin occurs upon fome coins. On the money of the Crusaders iconographic types are very common.

The general revival of a gold coinage in Europe Period followed, as we have faid, the coining of the Return to forino d'oro in 1252. But the first attempt to currency. institute a currency in the most precious metal was made in Apulia by the Norman Dukes of that Roger II., who had long made use in Sicily of Arabic gold coins of the Fátimy type, at length struck gold coins of his own, which having his name and title, DVX APVLIAE, were called ducats. These pieces were struck about A.D. 1150. After the Hohenstaufen dynasty had succeeded the Norman Dukes in Apulia and Sicily, Frederick II., befides striking some gold pieces for his Arab subjects, issued a very remarkable coinage modelled upon the old Roman folidus and half folidus: on the obverse the bust of the Emperor in Roman dress, and on the reverse an eagle with wings

The Flo-

displayed. The legend was (obv.) FRIDERICVS, (rev.) IMP. ROM. CESAR AVG. The next State to follow this example was Florence, which in A.D. 1252 struck the gold florin, bearing on one fide rino d'Oro. the figure of S. John the Baptist, and on the other the lily of the city. The corresponding filver coin bore the rhyming Latin verse,

> "Det tibi florere Christus, Florentia, vere."

Owing in part to the great commercial position of the city, in part to the growing want felt





PIORING D'ORO.

throughout Europe for a gold coinage, the use of the gold florin spread with extraordinary rapidity—

> "La tua città . . . Produce e spande il maladetto fiore Ch'a disviate le pecore e gli agni Però c'ha fatto lupo del pastore." 1

So general was the currency obtained by this coin in Europe that we presently find it largely copied by the chief potenates in France and Germany, as, for example, by the Pope John XXII. (at Avignon), the Archbishop of Arles, the Count of Vienne and Dauphiny, the Archduke Albert of Austria, the Count Palatine of the Rhine, the

¹ Paradifo, ix. 127-131.

Archbishop of Mainz, the free town of Lübeck, the Kings of Hungary and Bohemia, and the King of Aragon; while in other places, as France and England, where the first gold coinage was not so distinctly an imitation of the florin, it was obviously suggested by it.

The town of Italy which rivalled Florence in the extent of its iffues was Venice, which first struck its gold coin, the ducat, about A.D. 1280. The piece was afterwards called zecchino (sequin). It bore on one side a standing sigure of Christ, on the other the Doge receiving the standard (gonfalone) from S. Mark. The motto was of the same kind as that on the silver slorin:

"Sit tibi, Christe, datus, quem tu regis, iste ducatus."

Genoa also issued a large currency in gold, as did the Popes (when they returned to Rome), and the Kings of Naples and Sicily.

The country north of the Alps which first issued an extensive gold coinage was France. This was inaugurated by S. Louis, of whom we have numerous and various types. Of these the agnel, with the Paschal Lamb, is the most important. Louis's gold coins are, however, now scarce, and it is possible that the issue was not large. It became extensive under Philip the Fair.

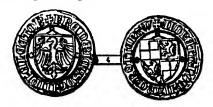
Other changes were introduced into the money of Northern Europe at this period. Large denarii, gross denarii, afterwards called gross (gros), and in English groats, were coined first at Prague, after-

wards chiefly at Tours. We have already spoken of the so-called brasteates of Germany. These at this time became larger, to correspond in appearance with the grossi of France and the Low Countries. The use of gold coins and of groats became general in England during the reign of Edward III.

Fourteenth Century.

We have now arrived at the fourteenth century. The coinage of this period has certain marked characteristics, though the exact types are far too numerous to be even mentioned. The general characteristics of the fourteenth century money are In the first place it reflects the artistic, specially architectural, tendencies of the time. The architecture of this period, leaving the fimplicity of the earlier Gothic, and approaching the Decorated or Flamboyant style, when more attention is paid to detail, is very well fuggested by the coins, where we see the effects of the same minute care and beautiful elaboration. Nothing can in their way be more splendid than the gold deniers of Louis IX. But as time passes on, this elaboration becomes extreme, the croffes lose their fimple forms, and take every imaginable variety fuggested by the names fleury, fleurt, quernée, avellanée, etc., while the cusps and treffures around the types are not less numerous and varied. iconographic types are fewer upon the whole, especially in comparison with the number of types in existence at this time; the crosses themselves are rather parts of the structure of the coins than religious fymbols, while now for the first time

shields and other heraldic devices, such as cress, caps of maintenance, mantlets, etc., become common. The coin below may serve as a sample of the coinage of the early years of the sisteenth century. Anyone who is acquainted with the history of this century, the white dawn, as we may call it, of the Renaissance, will discern in these characteristics of the coinage the signs of the times.



GROS OF THE FIFTEENTH CENTURY.

From the time of the issue of the fiorino d'oro, Person the initiative in most of the great changes which The Rewere wrought in the coinage of Europe belonged Era. to Italy. It is naturally on the coinage of Italy that the first rise of the artistic renaissance is dis-It is in the fifteenth century that we first have portraits upon coins which are distinctly recognifable, and no longer merely conventional. Portraits. This century is the age of the greatest Italian medallists, of Pisano, Sperandio, Boldu, Melioli, and the rest; and though these earliest medallists were not themselves makers of coin dies, it was impossible that their art could fail before long to influence the kindred art of the die-engraver. Portraits begin to appear upon the Italian coins about 1450. In the series of Naples we have

during this century money bearing the heads of Ferdinand I. and Frederick of Aragon, and later on of Charles V. and Philip of Spain. The Papal feries is peculiarly rich in portrait coins, which were engraved by fome of the most celebrated artists of the fifteenth and sixteenth centuries, as by Francesco Francia and Benvenuto Cellini. The portraits of Alexander VI., Julius II., and Leo X., are especially to be noted. Cellini also worked for Florence, and we have a fine series of the Dukes and Grand Dukes of this city, beginning with the Alessandro il Moro. we have coins with the heads of Alessandro Sforza, of Galeazzo Maria and the younger Galeazzo, of Bona, the mother of this last, and of Ludovico, and again, after the French conquest, of Louis XII. and Francis; later still, of Charles V. and Philip. The coins of Mantua, Ferrara, Modena, Bologna, Parma, and Mirandola, are all worth a lengthy study. Venice and Genoa alone among the great towns of Italy kept their money almost unchanged, probably from commercial confiderations, like those which prompted Athens to adhere to the archaic form of her tetradrachms.

In France, authentic portraits upon coins first appear in the reign of Louis XII., and the beauty of the medallic art in France is well illustrated by the money of Francis I. and Henry II., and only one degree less so by that of Charles IX. and Henry IV. The celebrated engravers Dupré and Warin belong to this last reign. In England, the most beautiful portraits are those on the coins of

Henry VII. and Henry VIII., though those of Mary and Edward VI. are only one degree inferior. The first Scottish coins with portraits are those of James IV. The German coins show traces of the peculiar development of German art. Those of the Emperor Maximilian are the most fplendid and elaborate. Some of these are worthy of the hand of Dürer, to whom they have been attributed—though without much authority. Next to these, the series of Saxony, of Brunswick, of Brandenburg, and the coins of some of the German and Swiss towns, are to be noted. Even the remote northern lands, Sweden and Denmark, did not escape the influence of the age.

We must not omit to mention that the first rude coinage of Russia begins during this period. The country, however, possessed no properly ordered monetary system before the reign of Peter the Great.

The coinage subsequent to 1600, though it Period V. Modern receives more at ention from collectors than any Coinage. other, must be pronounced, upon all historical grounds, by far the least interesting. And for this reason, if for no other, that our historical documents for this period are fo voluminous that the coins can ferve l'ttle purpose, save as illustrations of these documents; we cannot hope to gain from them any important light upon the times. it cannot be denied that they have an interest regarded as illustrations merely, and some phases of this interest must be briefly indicated.

And first, in a general way, the modern coinage

illustrates well the rife of the commercial spirit of the West, which, taking a fresh start with the discovery of America in the fifteenth century, has fince become perhaps the chief determining force of our modern civilization. For now the coinage of all countries becomes as much improved for commercial purposes as it is artistically debased. The introduction of the "mill" in the manufacture of coins, in place of the older device of striking them with a hammer, greatly improved their symmetry and the facility with which the money could be counted, while the use of an indented edge (commonly called "a milled edge") prevented the practice of clipping, which was fo frequent in earlier times, and thus tended to keep coins to a just weight, and so greatly to simplify exchange.

Portraits of Sovereigns.

In a more particular way the coins of each nation are interesting, as now always, or nearly always, bearing the head of the reigning sovereign of the country. By this means we get a series of historic portraits, which, if not of much artistic excellence, are, on the whole, trustworthy. These are the better from the fact that large silver coins (crowns or thalers) were now generally current in Europe, having been introduced during the preceding epoch. Gustavus Adolphus, Frederick the "Winter King" of Bohemia, and other heroes of the Thirty Years' War; Christina, Queen of Sweden; the "Great Elector" of Brandenburg; Charles XII. and Peter the Great; Louis XIV. and the contemporary Emperors of the House

of Austria: Frederick William I. of Prussia: Frederick the Great and Maria Therefa; an excellent feries of the Popes; and finally the English fovereign, may be cited as the coin-portraits most likely to interest the historical student. The money of the Czar Peter deserves, indeed, a special attention, as it is the first regularly ordered series of coins issued in Russia, and, when compared with the money which preceded it, is a type by itself of the improvements which Peter introduced into the condition of the country.

Another feature connected with the large filver Medallic coins is a certain tendency which we find to make Character. use of these for medallic purposes. This is especially the case in Germany. Among the earliest examples of this use may be cited the Luther celebration medals, iffued in Saxony on the jubilees of the Reformation held in 1617 and 1630. The latest is the Sieges-Tbaler, struck after the Franco-German War in 1870. The thalers issued by Ludwig, King of Bavaria, father of the present King, almost all of which commemorate either fome event of his reign or the erection of fome public building, form the largest series of coins of this medallic kind. The fcbütz-thäler, issued in Germany and Switzerland as rewards to those who had been fuccessful in the national or cantonal shooting-contests, deserve mention in this place. The Papal coins are also frequently commemorative of historical events or of the erection of public monuments.

Finally, in some of the towns of Germany

Views of Cities.

and Switzerland, the reverses of the coins bear views of these towns, which are sometimes so drawn as to form a very pleasing design. Lucerne, Zurich, Augsburg, Cologne, Constance, Danzig, Hamburg, Magdeburg, and Nuremberg, give examples in various degrees of excellence of this style of decoration. Thus, while the coinage of England, as we shall have occasion to remark in the next chapter, toward the end of the feventeenth century loses all artistic merit and originality of defign, and ceases to perform any function fave that of a medium of exchange, the same fate does not till more than one hundred years later overtake some of the continental issues. The latest coins which can boast of artistic beauty are those of Napoleon I., especially the series struck for Italy, on which the head is finely modelled. Some of the coins struck during the French Revolution are interesting from their containing allufions to contemporary historical events.

Weights and Denominations, The student of European history must be upon his guard against the danger of consounding money of account with coined money. As we have said, the new denarius of Charlemagne was, from the time of its introduction till the thirteenth century, practically the only piece coined in western continental Europe. The Roman gold coin, the foliaus, however, continued to be used for some time, and for a much longer period it remained in use as a money of account. The solidus was translated in the Germanic languages by schilling, shilling, skilling. Thus when we read of solidi and

shillings it does not in the least follow that we are reading of actual coins. The real coins which passed current on the occasion spoken of were very probably simply the denarii, or pennies, but they were reckoned in the shilling or solidus of account which contained (generally) twelve denarii.

Other moneys of account were in reality fimply weights, as (1) the pound, which was the Roman weight, the libra, containing twelve ounces, and in filver reckoned as equal to 240 denarii; and (2) the German (Teutonic) weight, the mark, equal to two-thirds of a pound, i.e., eight ounces and 180 denarii. It need hardly be faid that the actual weight of the denarius foon fell below this nominal weight of twenty-four grains. The recollection of the three denominations of libra, folidus, and denarius is preferved in our abbreviations £ s. d. for pounds, shillings, and pence.

We have already spoken of the grossus, or groat. The gold coins in France received a variety of names, of which the most usual and the widest spread was écu. In Germany the earliest gold pieces seem to have been called ducats, and this name was continued in the subsequent gold coinage of the sixteenth and seventeenth centuries. The weight of the ducat was sounded upon the weight of the forino of Florence and of the ducat or zecchino of Venice, usually about sifty-four grains, and these equal to about one hundred denarii of the old value. As, however, the silver coins contemporary with these ducats, though nominally denarii, were exceedingly de-

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based, the relative value of the gold was very much higher.

One other coin-name of wide extension is the tbaler, or dollar. The origin of this name lies in the Joachimsthal near the Harz Mountains, the mines of which furnished the silver from which these large pieces were first struck.





CHAPTER V.

COINAGE OF THE PRITISH ISLANDS.



N the last chapter a brief sketch was given of the general numismatic history of Europe in Christian times. In the present chapter we confine

our attention altogether to the coinage of our own islands; not, however, from Christian times only, but from the earliest period in which a coinage was known here. During the greater part of this sketch it will be necessary to keep in mind the character of the currency in the other lands of Europe, for the monetary history of the Middle Ages—we might add the political history also—can only be properly studied as a whole. The different epochs into which the history of the coinage of Europe has been divided will therefore serve us again in the present case. Our first period, however, precedes any of these epochs, for here we have to do with a currency in use in Britain before the introduction of Christianity.

The circumstances attending the first introduc-

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The Coinage of the Britons.

tion of a coinage into these islands require some explanation. For the remote causes of this event we have to go back as far as to the times of Philip of Macedon, and to the acquisition by him of the gold mines of Crenides (Philippi). The refult of this acquisition was, as is well known, to set in circulation an extensive gold currency, the first which had been widely prevalent in the Greek world. The gold staters of Philip obtained an extensive circulation beyond the limits of Greece-a much wider circulation than could have been obtained by any filver currency. Through the Greek colony of Massalia (Marseilles), they came into the hands of the Gauls. Massalia was, we know, the chief trading centre for the western lands, and for the barbarian nations of Northern Europe. not long after the death of Philip that Pytheas, the great "commercial traveller" of Marseilles, made his voyages to Britain and the coasts of Germany, as far as the mouth of the Elbe, or even, some think, the Baltic. We may readily believe that Marseilles was then in some relation with Northern Europe through Gaul; and it would feem that at this time the Gauls began to appreciate the use of a coinage, and to make one for themselves. The pieces thus manufactured were simply imitations of the gold stater of Philip. That coin bore on the obverse a beardless head laureate, generally taken to be the head of Apollo. but by some the head of young Heracles, or of On the reverse is a two-horse chariot The Gaulish coins were copies of this (biga).

piece, gradually becoming more rude as time went on, and about the middle of the second century B.C., the southern coast of Britain adopted from Gaul the same habit. The earliest British coins were thus of gold, and though immediately only copies of the Gaulish money, they were in a remote degree copies of the staters of Philip of Macedon. The copies have, in nearly every case, departed so widely from the original, that, were it not that the Gaulish money affords us examples of an intermediate type, we should have



BRITISH GOLD COIN.

great difficulty in recognifing the relationship of the British to the Macedonian coin. This is the history of the introduction of a coinage into the British Isles.

The earliest coins of Britain were exclusively of gold, and were devoid of inscription; any fign which has the appearance of a letter being in reality only a part of the barbarous copy of the Greek coin, and without meaning in itself. About the time of Caesar's invasion, however, the coins begin to carry inscriptions upon them—the name of some chief or tribe, the former being in most

cases unknown to history save from his coins. One or two historical names do occur-as Commius, possibly the King of the Atrebates, who may be supposed to have fled into England; and certainly Cunobelinus, King of the Trinobantes, the Cymbeline of Shakespeare. After the Roman conquest of Gaul, the native currency there was exchanged for the imperial coinage, and the change foon affected the coinage of Britain, which from about the Christian era began to make coins upon the Roman pattern. This fact is fymbolical of the Romanising influence in the southern districts, which in this country, and in so many others, preceded the actual subjugation of the land by Roman arms.

Roman Mints. After the complete Roman conquest the native currency ceased. Roman mints were not established in Britain until the time of Carausius (A.D. 287-293), who was Emperor in Britain only. Carausius' mints were Londinium and Camulodunum (Colchester). Between the time of Allectus and that of Constantine the Great no money was coined in Britain. The latter Emperor did not use a mint at Colchester, and struck at London only. The last imperial coins struck in Britain were those of Magnus Maximus (died A.D. 388).

Coinage of the Saxons. From this period till after the beginning of the seventh century there is an almost total want of numismatic documents. There can be no question that the Britons continued to use the later Roman coins, especially those of Constantine and his immediate successors, which seem to have been ftruck in large numbers. Such coins as came into the hands of the Saxon invaders would probably be cherished rather as ornaments than for any other purpose. This would at any rate be the case with the gold coins. We find that Roman gold coins were very extensively used as ornaments by the northern nations during the Viking age, and that they were imitated in those peculiar disclike ornaments known as bracteates. In the same way we find an imitation of a gold coin of Honorius engraved with Saxon runes. But gold belonged rather to the chiefs than to the great body of the people, and for the use of these last a regular coinage of silver appeared soon after the beginning of the seventh century.

The earliest Saxon coins, like the earliest British, The Sceal are anonymous, the only trace of letters upon most of them being nothing more than a blundered imitation of the coin-legend which the engraver was endeavouring to copy; and for this reason it is impossible accurately to determine their date. These early Saxon coins are generally known to numismatists as sceattas, and it seems probable that at one time they were distinguished by that name. But sceat properly signifies only treasure, and it is not likely that the word was at first used to denote any special denomination of coin.

The anonymous sceattas, hardly possessing an

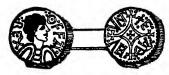
¹ These bracteates are not to be confused with the German silver bracteates spoken of in the last chapter. These were of gold, were made in the Scandinavian countries, and used as ornaments, not as coins.

² Primarily, treasure; secondarily, tax.

historic, or, in the strict sense, a numismatic interest, have suffered too much neglect at the hands of collectors. For they are, in some respects, the most curious and noteworthy coins which have been issued since the Christian era. no other feries of coins do we find among fo small a number of individual pieces fo great a variety of designs. The only series of coins which can in this respect be compared with the sceattas is that of the electrum pieces struck in Asia Minor in the fifth and fourth centuries B.C. The larger number of actual pieces among the sceattas are indeed copied from Roman coins; many also from Merovingian filver pieces. But among those which remain there are a great number of defigns which feem perfectly original, and which far outnumber the types taken from any other fource. Of these apparently original and native works of art we may count between thirty and forty distinct defigns; and as they are probably earlier than most of the extant remains of Saxon or Irish architecture, and earlier than most of the Saxon and Irish manuscripts, the interest which belongs to these pieces is very great. It is impossible to describe these designs here; a great number consist of some fantastic bird, or animal, or serpent, similar to the animals which appear in fuch profusion in the Saxon manuscripts, and at a later period in architecture.

It is evident that the Germanic peoples had a special partiality for a coinage in silver; and this may have dated back to quite early days, when

the old confular denarii (ferrati, bigatique 1) were current among them. Mommsen tells us that when the filver coinage of Rome was debased, the old pieces of pure metal were almost absorbed for the purpose of exchange with the barbarian nations of the North. We find further evidence of this partiality in the fact that the filver sceattas were current in England before the grand reform made by the introduction of the new denarius into Europe,2 and in the fact that this very reform was due to the most Teutonic (last Romanised) section of the Frank nationality. When, therefore, the great reform was brought about on the Continent, of which we have spoken in the preceding chapter, the effect was less felt in England than in any other land; it refulted merely in the exchange of the sceat for the filver penny, the former standing probably to the latter in the proportionate value of 12 to 20 ($=\frac{8}{1}$), though according to some documents they were in the proportion of 24 to 25.



PENNY OF OFFA.

The penny, introduced about 760, differed from The the fceat in appearance. The latter was small and thick, the penny much broader but thin. The

¹ Tacitus, Germ., c. 5.

² See Chapter IV., p. 81.

pennies of Offa are remarkable for the beauty and variety of their designs and an artistic excellence which was never recovered in after years. The usual type of the penny consists of, on one side, a buft, a degraded form of the buft on Roman coins, and on the reverse a cross; but a very large number of coins have no buft, and the cross is by no means an invariable concomitant. The legend gives the name of the King as OFFA REX, AELFRED REX, or with the title more fully given, OFFA REX MERCIORUM. On the reverse appears the name of the moneyer, that is to fay, the actual maker of the coin: at first the name simply, as EADMUUN, IBBA, later on with the addition of MONETA (for monetarius), and later still with the name of the town at which the piece has been struck, as GODMAN ON1 LUND. Town names begin to appear on coins in the reign of Egberht, King of Wessex. not infrequent on the pennies of Aelfred, and universal from the time of Aethelred the Unready.

It is to be noticed that the treasure plundered from England by the Vikings seems first to have given to the Northern people the notion of issuing a currency. Rude imitations of Saxon money are frequently discovered in the Western Isles of Scotland, and were doubtless issued by order or for the behoof of the Danish or Norwegian Kings of those parts. In the same way we find that the Norse Kings in Ireland issued a coinage in imitation of that of Aethelred II. Most of the early coins of Norway are likewise copied from the coins of this King. When the Danish dynasty of Cnut

¹ Probably for [m]on[ETARIUS].

(Gormson) supplanted the English line of Kings, it made no change in the coinage of this country, though it was instrumental in introducing an improved coinage into Denmark.

Nor, again, did the Norman conquest make any Norman immediate change in the English currency. penny long remained the fole English coin. variety of towns at which money was struck, of moneyers employed for this work, and of types made use of by them, reach their maximum in the reign of Edward the Confessor; but those of William I. and William II. (for the coins of these two Kings cannot with certainty be distinguished) are little less numerous. After the reign of William II., however, all these begin steadily to decline, until we find, in the reign of Henry II., only two different types, and the latter of the two extending, without even a change in the name of the King, into the reign of Henry III. This fimplification in the appearance of the penny corresponds with a certain amount of centralization in the regulation of its issues. It would seem that down to the middle of the reign of Henry II. each separate moneyer was responsible for the purity of his coins, but that shortly after this date a general overfeer was appointed, who was responsible to the King's Government.

In this approach to uniformity the general types which furvive are those which have on the obverse the head or buft of the King facing, and on the reverse some kind of cross. At the beginning of the reign of Henry II. the latter is a cross patée

cantoned with crofflets. This changes to a short cross voided (that is, having each limb made of two parallel lines, very convenient for cutting the coin into halfpence and farthings), and that again changes to a longer cross voided. But in the reign of Edward I. the forms of both obverse and reverse become absolutely stereotyped. And this stereotyping of the coin into one fingle pattern is the first very important change in the penny which took place fince its introduction. The stereotyped form henceforward until the reign of Henry VII. is as follows: obverse, the King's head (sometimes with slight traces of buft), crowned, facing; rever/e, a long cross patée with three pellets in each angle. this reign, too, the names of moneyers cease to be placed upon coins. Robert de Hadleye is the last moneyer whose name appears. Finally we have to notice that Edward I. re-introduced a coinage of halfpence, unknown fince Saxon times, and first struck the groat and the farthing. The groats were not in general circulation till the reign of Edward III.

Groat, Halfpenny, Farthing.

We have many documents showing that in making these changes of coinage Edward I. also reformed the constitution of the mint in many particulars. His pennies obtained a wide circulation not only in this country but on the Continent, where they presently (much as the forino did) gave rise to imitations. The closest copies are to be seen in the money of the various states of the Low Countries, as the Dukedom of Brabant, the Counties of Flanders, Hainault, etc. Other imitations are to be found in the denarii of the

Emperors of Germany and the Kings of Aragon. The English money never followed the rapid course of degradation which was the lot of the continental coinages; wherefore these English pennies (also called efterlings, sterlings, a word of doubtful origin) were of quite a different standard from The English penny did, the continental denarii. indeed, continually diminish in fize, so that before the type introduced by Edward I. was radically changed (in the reign of Henry VII.), the penny had shrunk to not more than half of its original dimensions. But this degradation was slow compared to that which was undergone by the continental coins.

We have now for a moment to retrace our steps Introduction of to the latter part of the reign of Henry III. the preceding chapter we spoke of the re-introduction of a gold currency into Western Europe. Only a few years after the first issue of the fiorino d'oro, namely, in 1257, we find the first record in the annals of the English coinage of the issue of a gold currency. In this year Henry III. struck a piece called a gold penny. It represented on one fide the King enthroned, on the other bore a cross voided cantoned with roses; and was at first valued at twenty pence, afterwards at twenty-fix. The innovation was premature, and the coin being unpopular had foon to be withdrawn from circulation. It was not till nearly ninety years afterwards that a regular gold coinage was fet on foot.

In 1343 or 1344 Edward III. issued this new gold coinage. It at first consisted of pieces

Floring.

called *florins*, half and quarter florins. The obverse types of these three orders of coins were—(1), the monarch enthroned between two leopards; (2), a single leopard bearing the English coat; (3), a helmet and cap of maintenance with small leopard as crest; a cross formed the reverse type in every case. These pieces were rated too high, and were almost immediately withdrawn from circulation; after which were issued coins of a new type and denomination, nobles, half-nobles, and quarter-nobles.

Nobles,



NOBLE OF EDWARD III.

The nobles and half-nobles were the same in type; on the obverse they showed the King standing in a ship; the quarter-noble contained a shield merely on the obverse. The type of the noble is perhaps commemorative of the naval victory off Sluys. The legend on the noble was ihs [jesus] AVTEM TRANSIENS PER MEDIVM ILLORVM IBAT (S. Luke iv. 30), a legend which long continued on the English money, and which has given rise to a good deal of absurd speculation. The legend was a charm against thieves, but possibly bears some further reference to the victory commemorated

by the type. The noble was made equal to half a mark (a money of account), or 80 pence English; in weight it was exactly that of the modern English sovereign, 120 grains. As it was of very pure gold, and perhaps the finest coin then current in Europe, it was, like the penny of Edward I., a good deal imitated abroad (always, we may be sure, to the advantage of the imitator), and laws were constantly being enacted, without much success, to hinder its exportation.

Before we leave the reign of Edward III. we Anglomust cast one glance at a class of coins which now Coinage. began to assume considerable dimensions, namely, the Anglo-French money, or coins struck for the English possessions in France. These naturally followed French types and denominations. early as the reign of Henry II. we have deniers struck for Aquitaine; Richard I. struck for Aquitaine, Poitou, and Normandy; Edward I. coined for Aquitaine and Bordeaux. But under Edward III. and the Black Prince (Governor of Guienne) quite a large issue of Anglo-French coins, both in gold and filver, appeared. The gold coins of Edward III. were the guiennois (standing figure in armour), leopard, chaife (King enthroned), and mouton (Paschal Lamb), and in silver the bardi (half-figure holding fword), double-bardi, gros, demi-gros, denier, demi-denier (also apparently called ardit [sic]). Edward Prince of Wales struck guiennois, leopard, chaife, demi-chaife, hardi (d'or), and pavillon (prince under a canopy), and in filver money the same as his father. Edward III. began,

too, the iffue of Calais filver groats, which (as Calais was really henceforth an English town) can scarcely be counted among the Anglo-French coinage. In every respect, this coin, as well as the Calais half-groat, penny, etc., exactly corresponded to the English money. In order to end the subject we may add that Richard II. struck gold and silver hardis and demi-hardis as well as deniers and half-deniers. Henry V. struck in gold moutons and demi-moutons, and possibly falutes (the angel saluting Mary), and gros. Henry VI. struck salutes, angelots, and francs, and in silver grand and petit blancs. He also continued an extensive issue of Calais money. With Henry VI. the Anglo-French coinage really comes to an end.

Edward IV. introduced fome important changes into the gold coinage. He feems to have struck a few nobles of the old type; but he very foon made an alteration in the type of the noble by fubstituting on the reverse a sun for the older cross, and on the obverse, placing a rose upon the fide of the ship, in the form of which last some other changes were introduced. From the rose on the obverse the coins came to be called rose nobles, and owing to changes in the relative values of gold and filver they were now worth 10s. (120 pence), instead of 6s. 8d. (80 pence) as before. To supply a coin of the old value of half a mark, a new gold piece was struck, called at first the angel-noble, but foon fimply the angel. On one fide it represented a ship, bearing (instead of the King) a cross; on the other was S. Michael

Rose Noble.

Angel.

overcoming Satan. The motto was per crycem tvam salva nos xpe (christe) redemptor.

They have in England
A coin that bears the figure of an angel
Stamped in gold, but that's insculped upon:
But here an angel in a golden bed
Lies all within.

Shakespeare is much given to playing upon this word,² and we find frequent allusions of the same kind in other writers, his contemporaries.



ANGEL OF EDWARD IV.

We have spoken of some coins probably struck Scottish by the Norsemen in the western isles. The regular coinage of Scotland does not begin before 1124 (David I.), when an issue of pennies (or sterlings, Sterling. as they were generally called in Scotland) began. Even yet we find that offences were more frequently punished by sines of cattle than of money. At first the money of Scotland copied very closely the contemporary currency of England. Thus the pennies of David resemble those of Henry I.; the next coinage, that of William the Lion, grand-son of David (1165-1214) resembles the money of

¹ Merchant of Venice, ii. 7.

² Cf. Merry Wives of Windsor, i. 3; King John, ii. 1.

Henry II.; the pennies of Alexander II. have short and long voided crosses, like those of Henry III., and the coins of Alexander III. are like those of Edward I. This King, like Edward, added halfpennies and farthings to the currency of pennies. But both the moneyers and the places of mintage are far less numerous in Scotland than in England. We count no more than fixteen of the latter. The coinage of John Baliol and of Robert Bruce followed the type of Alexander III. mint-records for these reigns are lost: they begin again in the reign of David II. This King issued nobles after the pattern of Edward III.'s nobles. He also struck groats and half-groats, pennies, halfpennies, and farthings.

All this time it will be feen that, despite the war between the two countries, English influence was paramount in determining the character of the Scottish coinage. There was present a certain French influence as well, which may be detected in minor marks upon the coins (fleurs-de-lis, and fuch like), and which was exercifed also in a very unhappy direction towards a degradation of the currency. Scotland followed the continental fashion in this respect, and the commercial relations of the two bordering countries are marked by a perpetual chorus of complaint on the part of England of the debased character of the Scottish money. Thus in 1372 we find both Scottish gold and filver forbidden in England, and as if the prohibition had been relaxed, it is repeated in 1387. In 1390 Scottish money is admitted at

half its nominal value; in 1393 it is forbidden again, fave as bullion, and in 1401 there is a decree of Parliament to the same effect.

In the reign of Robert II. Scotland took a new departure by coining fome gold pieces of an original type (no longer borrowed from England), viz., the Lion and St. Andrew. The first had Lion. the shield of Scotland with rampant lion, the fecond the figure of St. Andrew with a shield on the reverse. In the reign of Robert III. we note a further fign of continental influence in the introduction of billon (base metal) coins. James I. struck the demy (Obverse, arms in lozenge; Re-Demy. verse, cross in tressure) and half-demy; James II. struck demies, St. Andrews, and half St. Andrews. James III. introduced two new types of gold coins, viz., the rider (knight on horseback) and the Rider. unicorn, which shows a unicorn supporting the Unicorn. Scottish shield. The fame King issued several denominations of billon coins, as placks, half-placks, Plack. farthings.

Hoards of English coins of the ninth century The Coinhave been found in Ireland, and were doubtless Ireland. taken there by the Norsemen settled in the land. The actual coinage of these Norse Kings, however, does not begin till the end of the tenth century. It copies almost invariably a peculiar type of the coinage of Aethelred II. (978-1016), having on one side a bust uncrowned, and on the other a long voided cross. After that we have no Irish coinage until subsequent to the conquest of a portion of the country by Henry II. Henry made

his fon John governor of the island, and John struck in his own name pennies, half-pennies, and farthings, having on the obverse a head (supposed to be that of John the Baptist) and on the reverse a cross. During his own reign John coined pennies having the King's bust in a triangle on one side; on the other the fun and moon in a triangle. III.'s Irish pennies are like his English long cross type, fave that the King's head is again furrounded by a triangle. This diffinction once more ferves to separate, in point of type, Edward I.'s Irish from his English coins, the reverse types of the two being the fame. John struck at Dublin and Limerick, Henry III. at Dublin, and Edward I. at Dublin, Cork, and Waterford. One or two Irish pennies of Henry V. or VI. have been spoken of, but there was no extensive coinage for Ireland between the reigns of Edward I. and Edward IV. The Irish coins of Edward IV. were very numerous, and confifted of double-groats, groats, halfgroats, pennies, and (in billon) halfpennies and farthings. The types of these coins are varied; fome are but flight divergences from the correfponding English coins; others have for reverse a fun in place of the usual cross; others again have a fingle crown on obverse, on the reverse a long cross; and another series has three crowns, with the English shield for reverse. The mints are Dublin, Cork, Drogheda, Limerick, Trim, Waterford, and Wexford. No gold coins were ever struck for Ireland.

Hen. VII. We have thought it best to dispose of the

Middle Age coinage of all Great Britain and Ireland before we come to speak of any currency ftruck in more modern days. We have thus carried our enquiries down to the accession of Henry VII. The division which has been thus made in our subject is not, indeed, an equal divifion in respect of time nor even of recorded historical events; but it is obviously the most fuitable which could be found. It corresponds generally with the line of demarcation separating modern from mediaeval history, and with what we may call the installation of the Renaissance. line is always more or less shadowy and indefinite, but nowhere is it less so than in England. Wars of the Roses were the final act in the drama of mediaeval English history. When these ended in the Battle of Bosworth the new era definitely began.

We have feen that this age of the Renaissance was for the whole of Europe, so far as the coins were concerned, notable chiefly as being the era of portraiture. Portraits begin on English coins with Henry VII. Up to his nineteenth year this King continued the older forms of silver currency, but in 1504 he made a complete change. He coined shillings in addition to the groats, half-groats, shilling pennies, etc., which had up to that time been current; and on all the larger pieces, in place of the conventional bust facing which had prevailed since the days of Edward I., he placed a profile

¹ Chapter IV., pp. 91-93.

buft which had not been feen on coins fince the days of Stephen.1 The bust appears upon all coins of higher denomination than the penny. A new type was invented for the latter coin, the fulllength figure of the monarch enthroned. The portrait of Henry VII. is a work of the highest art in its own kind. Nothing superior to it has appeared fince, nor anything nearly equal to it except upon some of the coins of Henry VIII. and Edward VI. The artistic merit of these pieces is so considerable that on that account alone they are worthy of peculiar study. It has been well pointed out by archaeologists that one interest belonging to the study of Greek coins lies in the fact that they are tokens of the artiflic work of many places of which no other fuch monuments remain. The same may almost be said of the coinage of England during the Renaissance. In the great artistic movement of those days, England feems at first fight to take no part. While Italy, France, and Germany had each its own schools of artists, and each its separate character of design, the conspicuous monuments made in England were the work of foreigners; they were the sculptures of Torrigiano or the paintings of Holbein. But as smaller monuments the contemporary coins are an evidence of native talent,

Art.

¹ It is worth noticing that Henry VII. was the first King subsequent to Henry III. who used a numeral upon his coins. Some of his shillings read HENRIG VII., others HENRIG SEPTIM. James IV. in the same way introduced (for the first time on Scottish coins) the word QUART. after his name.

for most of the engravers to the mint during these reigns bear genuinely English names.1

Next to the evidence of art-culture which the Increase of coins afford, comes the evidence of greater wealth, of larger trade and manufacture, and of an increased demand for a medium of exchange. When Henry VII. ascended the throne, although the country had just been suffering from a bitter and prolonged civil war, the great mass of the community was far from having been impoverished thereby. It was during all this period steadily acquiring wealth, and the wealth of the country, as a whole, was upon the increase. The careful reign of Henry VII. softered this increase. It need not surprise us, therefore to find an addition made to the coinage of the previous reigns.



SOVEREIGN OF HENRY VII.

Henry VII. struck the principal gold coins which were current in former reigns; that is to say,

¹ Nicholas Flynte, John Sharpe, and —— Demaire, are the names of the engravers during the reigns of Henry VII. and Henry VIII., as given by Ruding; the third may, likely enough, be a French name.

Rogers' Hift. of Prices, vol. iv., Intr., p. 22.

the ryal, or rose-noble (now worth ten shillings), Sovereign. the angel, and the angelet. In addition to these pieces he struck for the first time the pound fovereign, or double ryal, worth twenty shillings, a large gold coin representing the King enthroned, and on the reverse a double rose charged with the English shield. The piece measured more than one-and-a-half inches, and weighed two hundred and forty grains; that is to fay, twice as much as the present sovereign. It was without question the finest gold coin then current in Europe. It does not appear, however, to have been issued in large quantities.

Hen. VIII.

As we follow the history of coinage under the Tudors, we see the currency gradually increasing. in quantity and in the variety of its denomina-Henry VIII. did not indeed make any decided step in this direction, and in one respect, presently to be noticed, he made a conspicuous retrogression. Nevertheless he struck some twofovereign pieces, and he largely increased the number of fovereigns. At first this coin followed the type instituted by Henry VII., but later on a fecond type was introduced, having the King feated on a throne upon one fide, and on the other the English shield supported by a lion and a griffin. Henry coined half-fovereigns of the same type. He coined crowns or quarter-fovereigns and half-crowns in gold, having on one fide the English shield, and on the other the Tudor rose. He likewise struck rose-nobles or ryals, angels, and angelets of the types formerly in use. The

Crown.

older nobles had given place to the ryals which, at first meant to be current for fix-and-eightpence like their predecessors, had at once risen to be worth ten shillings. Henry VIII. now issued a new series of nobles at the leffer value. They were called George George nobles, from having on the obverse the figure of St. Noble. George on horseback slaving the dragon. In silver Henry struck pieces of the same denomination as those of his father-namely, shillings, groats, halfgroats, pennies, halfpennies, and farthings. earlier groats showed a profile bust like the groats of Henry VII., but in 1543 for this was substituted a buft facing or turned three-quarters towards the spectator, and the shillings of Henry VIII., which were first coined at this date, were of the same pattern.

It has been noticed how in the continental coinage heraldic devices begin during the fourteenth century to take the place of the simpler crosses which generally decorate the mediaeval Owing to the stereotyped character of coins. the English coinage between Edward I. and Henry VII., the same change could not be so early discovered here. But it is very noticeable in the currency of the Tudor dynasty. From the time of Henry VII. the English shield (quartering France) is rarely absent from the coins. over the cross on the reverse, which in many cases it almost completely hides from view. number of the heraldic devices, with which we are so familiar in the chapel and tomb of Henry VII. in Westminster Abbey, are introduced upon his coins or those of his immediate successors, as the lion, the griffin, the double rose, the portcullis. The last device was derived from the Beaufort family (the legitimated children of John of Gaunt and Catherine Swynford), from which Henry could claim descent.

Wolsey's Groat. One coin of Henry VIII. has a special historical interest. It is the groat struck at York by Cardinal Wolsey when Archbishop of York. On the piece he placed his cardinal's hat; and as this act was accounted illegal, and even treasonous, it was included in the bill of indictment against him:

That out of mere ambition you have caused Your holy hat to be stamped on the king's coin.

In the actual articles of indictment he is only blamed for, "of his pompous and prefumptuous mind," stamping the hat upon the groats struck at York, as if the offence lay especially in the iffuing of fuch large pieces with the infignia of his Several prelates before his time had placed their own initials and some symbol of their dignity upon the pennies of York, Durham, etc. It may, however, have been confidered part of the offence for which, as a whole, Wolfey was held to have incurred the penalties of a praemunire; namely, the endeavour to exalt unduly the position of his holy office, and to spread an impression among the people that his legateship gave him a power independent of the power of the Crown. groats and half-groats struck by Cardinal Wolsey

¹ Henry VIII., iii. 2.

have, beneath the shield on the reverse, a cardinal's hat, and on either side of the shield the letters T. W.

Edward VI. still further increased the gold Edw. VI. coinage, especially the coinage of sovereigns. He struck triple, double, and single sovereigns. latter at first followed the type of Henry VII., and the earlier fovereigns of Henry VIII., and Edward's double fovereign was of that type also. Other pieces showed the king with shorter robes, and of this type was the triple fovereign. Later Edward adopted a new defign—the half-length figure of the King to right, crowned, and holding the fword and orb. On the reverse was a shield. The half-fovereign was either of this type, or else presented only the bust of the King, with head either crowned or bare, and the reverse as before. In filver Edward VI. coined for the first time crowns, halfcrowns, and fixpences. The first two denomina-sixpence. tions represented the King riding to right, and the English shield on the reverse. The shillings and fixpences contained a buft crowned, either in profile to right or facing. The coins of this reign are Date. the first of English coins which bear a date.

Mary coined fovereigns of the earliest (Hen. VII.'s) Mary. type, the ryal of the old type—only that the figure in the ship is the Queen—as well as angels and angelets. Her groats, half-groats, and pennies were all of the same type, having a crowned bust of the Queen to right upon the obverse, and on the reverse a shield. After her marriage with Philip, Mary struck half-crowns and shillings.

The former have the bust of the King and Queen upon the two sides of the piece, while the latter have the two together, facing one another, "amorous, fond, and billing," on the obverse, and on the reverse a shield.

Elizabeth.

The number of coin denominations reaches its maximum in the reign of Elizabeth, from whose mints were issued no less than twenty distinct kinds of coin; that is to fay, in gold, the fovereign, ryal, half-fovereign, quarter-fovereign, half-quarter-fovereign, angel, half-angel, quarterangel; in filver, the crown, half-crown, shilling, fixpence, groat, threepenny, half-groat (or twopenny), three - halfpenny - piece, penny, threefarthings, half-penny, farthing. Fortunately the varieties of type were much less numerous. enough to fay that, of the first issue, the sovereign, the ryal, and the angel did not materially differ from the corresponding coins of Mary, and that the fovereign of the fecond iffue, with all its divisions, showed simply a crowned bust to left, with hair flowing behind; on the other fide, the shield, as before. The filver crown and halfcrown had a crowned profile buft to the left holding a sceptre; and all the other denominations of filver coins had a crowned profile buft without the sceptre. The sixpence and its divisions were distinguished by a rose placed at the back of the head.

Another series of coins struck by Elizabeth deserves particular mention. By virtue of a commission, dated January 11th, 1600, or 1601, a coinage was ordered, "unknown to the English

Threepenny, Twopenny, Threehalf-pence, mint, either before or fince her time, for it was by law exportable, and intended for the use of the for East East India Company." This is, in fact, the first Company. appearance of a colonial coinage for England. This coinage confifted of filver pieces, the fize of the Spanish coins of eight, four, and two ryals. The coins had on one fide the royal arms, on the The reasons which induced other a portcullis. the Queen to take this step were found and states-The East India Company had applied for leave to export Spanish dollars, representing that these coins alone were familiarly known, and therefore readily accepted, in the East. Queen determined to iffue a currency which was genuinely English, in order "that her name and effigies might be hereafter respected by the Asiatics, and she be known as great a Prince as the

All the facts which we have here summarised witness to the growth of siscality throughout the prosperous reigns of the Tudor dynasty. With this growth a number of economic questions came to the front, which long continued to tax the sagacity of statesmen. We are too ready to congratulate ourselves on our supposed superiority over our ancestors in the art of statecraft. But there can be no question that in one respect we stand in a position of immense advantage over them—in respect, that is, to our mastery of the most important laws of economy and sinance. There can be nothing more melancholy than to follow the enactments of successive reigns con-

King of Spain."

cerning the supply of bullion, and to note the radically false conception which the laws show touching the nature of wealth. Thus, in the reign of Henry VII., an Act was passed forbidding "any person dwelling in the realm to pay to any alien for merchandise, or other thing, any piece of gold coined in that or any other realm," etc. And the same kind of enactments follow one another with wearisome iteration. A still more important example of the ignorance of economic laws was shown in the liberties which the Government took with the purity and weight of the currency.

In earlier times, though men were no better instructed in economic science, a certain healthy moral instinct had long kept the rulers from degrading the title of the coins they issued. Men's instinct had taught them that such an act was fraudulent and unworthy, though in many cases, especially among the petty Princes (and still more especially the Prince Prelates) of Germany, this instinct had not been very efficient. Philip the Fair, of France, was one of the first who persistently debased his coinage, and Dante's scornful description of Philip—

Lì fi vedrà lo duol che fopra Senna Induce, falfeggiando la moneta, Quei che morrà di colpo di cotenna¹—

shows in what way his acts were regarded by healthy minds. But at the age at which we are

¹ Paradifo, xix. 118.

now arrived, no traditional laws of morality could hold their force unquestioned. Why, it was said, feeing that a pound or a shilling gains its value through the royal fanction, may not the fame fanction and the fame value be given to a piece of much lower metallic value, and thus the Government be the gainer, and yet the subjects not the losers? From the time of Philip the Fair the degradation of the coinage had proceeded rapidly in France and in most other European countries, including Scotland; but the purity of the English money had been hitherto unaffailed. Henry VIII. was the first of English monarchs who debased the sterling fineness of the coin. Some of his shillings and groats contained only one-third filver to twothirds copper. Some of his gold coins confifted of about five-fixths of gold to one-fixth of filver. This evil continued through the two fuccessive reigns, and was finally reformed by Elizabeth. Even Elizabeth, however, did not do her work completely, as, instead of withdrawing the base coins completely from circulation, she passed them over St. George's Channel for the use of her subjects in Ireland. It is a curious fact, and one which reflects credit upon the Queen and her advisers, that her reform of the coinage, wise, and indeed necessary as it was for the welfare of her subjects, was by no means forced upon the Queen by public opinion, but was on many fides viewed with great dislike. The opposite state of things would, of course, confer some slight and temporary advantages upon the producer, while the chief fufferers would be, as Elizabeth's proclamation faid, "All poor people that lived of their handlabour, as well artificers in cities and towns as labourers in husbandry, or men that took dayetall wages, either by land, by sea, or by fresh waters, and all mean gentlemen that lived upon pensions and stipends, soldes and wages."

Another reason why the old state of things was favoured by fome was that it would tend to bring into circulation a large number of pieces of low denomination. So foon as men had come to an understanding that a penny and a halfpenny were each not worth more than half their nominal values, a large number of what really were halfpennies and farthings would be found to be in circulation, and the making of small purchases. would be greatly facilitated. There is no doubt that these facilities were very much desired by the poor, and the want of a lower currency was much Up to this time no regular copper coinage had been introduced. The place of it was first fupplied by the iffue of tokens by private persons. These appear first to have been of lead. Erasmus speaks of the plumbei Angliae, apparently referring to leaden tokens in the reign of Henry VII. the reign of Elizabeth there was a very extensive issue of private tokens in lead, tin, latten, and leather. At length propofals were made for the iffue of a copper coinage—propofals not then carried into effect, though some patterns were ftruck.

Tokens.

To bring this subject to a close, we may add

that in James I.'s reign the use of copper tokens was fully recognifed, but that the monopoly of striking them was conferred upon certain individuals, at first upon Lord Harrington. The same custom was continued in the reign of Charles I., but in the abolition of privilege, which refulted from the Civil War, the monopoly lapsed, and the refult was an iffue of copper tokens by the principal tradesmen of almost all the towns of England. Thus arose the seventeenth century tokens, which are much prized by their collectors, and which are often of confiderable value to the local historian. In 1672 an authorized copper coinage of halfpennies and farthings was undertaken, and in consequence the issue of copper tokens, though it did not immediately cease, fell gradually into disuse. It revived again for a short time at the end of the last century, and the early years of this; that is to fay, from 1787 to 1795, and again from 1811 to 1815, owing to a scarcity in the copper money of the realm.

In order to difmiss the history of copper coinage, we have advanced far beyond the period with which we had been dealing. Before we again return to it—that is, to the English coinage immediately subsequent to the death of Elizabeth—we will take one glance at the Scottish coinage during the intervening period between the accession of James IV., already spoken of, and that of James I.

The coinage of Scotland during this period scotland. follows the same general lines as the English

currency, but in many respects it likewise shows

clear traces of French influence. Such influence is most apparent in matters belonging to art. We have faid that the first coins with portraits are fome groats of James IV. These pieces are noticeable from the fact that the type of buft does not refemble the type on any English contemporary coin. It is a three-quarter face to left. James V. at first struck groats nearly resembling those of Henry VII.'s later coinage; that is to fay, having a crowned buft to right. The most artistically beautiful among the Scottish coins belong to this reign and the early part of the fucceeding onethe reign of Mary. Few coins are more beautiful than the bonnet-piece of James V., a gold coin in weight 881 grains, midway between the English half-fovereign and the angel, and having on the obverse the bust of the King wearing a square cap or bonnet, or than the ryal of the early years of Mary's reign. The fame influences which were at work bringing about an immense extenfion of the English coinage, are traceable, though in a less degree, between the reigns of James IV. and James VI. A large number of gold coins was issued during these reigns. James IV. struck St. Andrews, riders, and unicorns, with the divisions of these pieces; James V., écus and bonnet-pieces; Mary, écus or crowns, twenty-shilling pieces, lions, ryals, and ducats, with the divisions of most of these coins. The same Queen struck silver ryals, a much larger coin than had been issued by any of her predecessors. Her other filver coins were the

onnet ieces. two-third and third ryal, and the testoon and halftestoon.

We have faid that the Scottish monarchs went far beyond the English both in degrading the title and in debasing the material of their money. No professedly billon coins were ever issued from the English mint: the Scottish had long established a currency in this base metal standing between silver and copper.1 Moreover, the Scottish penny had long fallen in value far below that of the English penny. The Kings of Scotland from time to time made efforts to establish a currency which should be exchangeable with that of the neighbouring country, and we find orders taken for the making of certain special denominations of money designed to serve this end. In 1483, for example, it was ordered that a gold coin should be struck of the fineness and weight of the English rose noble, and groats of the value of the English groat. The first of these designs was never carried into effect, but in 1489 a groat of the defired standard was coined. We find that it was equal to fourteenpence Scottish, so that the Scottish penny was between a quarter and a third of the English coin. When James VI. came to the English throne, however, the Scottish penny had sunk to be one-twelfth of the English.

James I. of England and VI. of Scotland had to James I.

¹ Among these billon pieces the bawbee (corrupted from bas pièce, in Scottish French) was the longest remembered, and is the most worthy of notice. The name is expressive of the influences under which the base money was introduced into Scotland.

maintain a double currency. In fact, the coinages of the two realms were not brought into entire uniformity until the reign of Anne, when the complete union was effected. For Scotland James struck in gold the twenty-pound piece, the ducat, the lion noble, the thissle noble, and the rider, before his accession to the English throne; and in silver, the fword dollar, the thissle dollar, and the noble, with the divisional parts of most of these coins, as well as pieces of two, four, sive, eight, ten, sixteen, twenty, thirty, and forty shillings, and several billon pieces. After his accession his peculiarly Scottish coins were the sword and sceptre piece, and the thissle mark.

The English coins of James were the sovereign, and the double or rose ryal. These were during his reign generally current for thirty shillings. The type of the ryal was that of the fovereigns of Henry VII. The half of this was the spur ryal, which at first followed the old type of the rose nobles or ryals, but afterwards showed on one fide a lion supporting the English shield (quartering Scotland and France), on the reverse the spur, or fun as on the rose nobles. The angel showed some variety of type from that of the previous reign. But the most distinctive coin of James I., and that which superseded all the others, was the unite or broad, a piece of twenty shillings, and designed to pass current in both countries. The type was at first a half figure holding fword and orb; subsequently a bust, either crowned or laureate. This last type prevailed, and earned for the piece the

Unite.

name laurel, while the motto faciam EOS IN GENTEM UNAM was the origin of its older name. The laurel wreath had never appeared upon the head of any previous English monarch upon his coins. As it is commonly worn by the Roman Emperors on their money, it was most likely adopted by James with the object of proclaiming his imperial rank as King of England, Scotland, and Ireland; for we find that he also, for the first time, adopted the title Imperator upon some of his medals.

It is noticeable that in the reign of James I. we Value. for the first time have the values of the coins given upon them. His thirty, fifteen, ten, and five-shilling pieces in gold, and his shillings, fixpences, half-groats and pennies, are marked with numerals expressing their value. The custom was continued in the reign of Charles I., and during the Commonwealth.

The variety of coin denominations reaches, as Number of Denominahas been faid, its maximum under Elizabeth. From tions. the time of the introduction of the unite this number begins rapidly to decline; fo that in the reign of Charles I. it almost reached the same simplicity which it now has. A comparison might, in truth, be instituted between the respective coinages of the Tudor and the Stuart dynasties and their respective literatures. The greatest artistic excellence belongs to the coinage (as to the literature) of the first era, while that of the second era stands next to it, and fuperior to anything which was subsequently produced. In the second class we

find a marked tendency toward simplicity and adaptability to the ordinary needs of life.

Thus the filver coinage of the Stuarts is practically the same as that which now exists, with the exception that James I. did not strike the smaller pieces, and that Charles I., in the midst of the Civil War, struck some large coins which were never afterwards reproduced. The crowns and half-crowns of James I. represent the King on horseback, the shillings the crowned bust of the King, the ordinary shield (now without any appearance of a cross) forming the reverse in each case.

Charles I.

Charles I.'s usual gold coinage is the unite, These pieces have the half-unite, and crown. King's bust on the obverse, and on the reverse a shield. His filver coins of higher denominations were like those of his father, and the lower denominations follow the type of the shilling. After the outbreak of the Civil War, Charles adopted for the reverse of his coins, both in gold and filver, what is called the Declaration type, namely the legend RELIG. PROT. LEG. ANG. LIBER. PARL. (The Protestant Religion, the Laws of England, and the Liberty of Parliament), written in two lines across the field of the reverse. Of this type he struck some pieces of three pounds, as well as large filver coins worth twenty and ten shillings, made out of the plate which was brought by his adherents to the royal mints.

Charles I. established mints at a great number of towns during the Civil War. Altogether we

have coins struck during his reign at the following places: Aberystwith, Bristol, Chester, Cork, Mints. Dublin, Edinburgh, Exeter, London, Oxford, Shrewsbury, Weymouth, Worcester, York. Beside the regular coinage, there was during the Civil Siege War a large iffue of fiege-pieces struck in towns or Pieces. castles which were in a state of siege. These are of Beeston Castle, Carlisle, Colchester, Newark, Pontefract, and Scarborough. Some of the Pontefract pieces may count as the earliest coins struck in the name of Charles II. The castle still held out after the death of Charles I. the governor placed upon the fiege-pieces the legend carolus secundus, or carol. II., etc., and on the other fide POST MORTEM PATRIS PRO FILIO.

In artiflic merit the coinage of Charles I. is



OXFORD CROWN OF CHARLES I.

only inferior to that of the earlier Tudor fovereigns. This King, whose taste in art is well known, employed upon his money several engravers of distinguished merit. Among these were Thomas Rawlins and Nicholas Briot. latter had first been engaged at the French mint, and while there had invented feveral improved methods of striking coins; but finding no appreciation of his talents, he came to England, and was at once employed by Charles. Rawlins was for a long time engraver at the Tower mint, and on the outbreak of the Civil War he removed with the mint to Oxford. While there he executed the famous Oxford Crown. The coin, though it does not differ materially from the crowns of Charles I. of the Declaration type, shows, behind the figure of the King on horseback, a view of the city of Oxford, in which the fortifications and fome of the chief buildings, notably Magdalen tower, are very clearly pourtrayed.

Commonwealth. The Commonwealth employed as their engraver the famous medallist, Thomas Simon, whose medallic portraits, made in conjunction with his brother Abraham, are among the finest art products of that age. The extreme simplicity of the types upon the coins did not, however, give Simon room for any great display of artistic talent. The coin bore upon one side a shield charged with St. George's cross (England), on the other side two shields, one with St. George's cross, and the other with the harp of Ireland. Presumably the sigure of the saint would have been considered more idolatrous than his emblem presented in the baldest form. It is remarkable, too, that during the Commonwealth was adopted for the

first, and also unhappily for the last time, the sensible device of having the legends both on obverse and reverse in English instead of Latin. On the obverse was simply the commonwealth of england, on the reverse the motto god with us. In 1656, when Cromwell had been raised to the rank of Lord Protector of the Commonwealth, he entrusted to Thomas Simon the task of preparing dies for a new coinage, which had on one side the profile bust of the Protector, on the other the shield of England, Scotland, and Ireland, and as an escutcheon of pretence that of Cromwell himself. The motto was appropriate and expressive, PAX QUAERITUR BELLO; and the whole piece was one of the finest of Thomas Simon's works.

All this time the coinage had been wonderfully simplifying its character. We have seen that James VI. definitely settled the silver currency upon the basis (so far as the number of pieces is concerned) which it has since rested upon. In the time of the Commonwealth there were, in reality, only two regularly current gold coins—the broad and half-broad. During the reign of Charles II. surther changes were made, which had the effect of definitely settling the denominations of coins down to the middle of the reign of George III. So that all that is really worth record in the history of English money comes to an end in the course of the reign of Charles II.

After his restoration Charles II. continued for some little time to employ the engraver of the Commonwealth, Thomas Simon, and this artist

executed the fovereigns and shillings of the first years of the reign, which are the most beautiful of Charles II.'s coins, in truth the last really beautiful coins which were issued from English mints. Simon was superseded by the engraver Blondeau, who had produced some patterns for Commonwealth coins, and Blondeau was succeeded by the Roettiers. Simon, in order to obtain his recall, executed his samous petition crown, in which the King is besought to compare the likeness upon that piece with any that was issued by the Dutch engraver to the Royal Mint. And in truth there can be no question that this pattern is in delicacy of treatment superior to any other English coin.

Guinea.

In the same year the twenty-shilling pieces began to be called guineas, from the fact that most of them were made from gold brought from Guinea by the African Company. The pieces actually made of this gold were stamped with an elephant below the buft, but the name which properly belonged to them was transferred to all, and by accident the value of the piece increased from twenty to twenty-one shillings. The earliest coinage of Charles had confifted of twenty and ten-shilling pieces and crowns: but in 1662 this iffue was exchanged for a coinage of pieces made by the mill, which were five guineas, two guineas, guineas, and half-guineas. This currency became henceforth stereotyped, so that from the reign of Charles II. to that of George II. inclusive, the English coinage consisted of five guineas, two

guineas, guineas, half-guineas, in gold; of crowns, half-crowns, shillings, sixpences, groats, three-pennies, two-pennies, and pennies, in silver. The last four denominations were only struck for issue as Maundy money. The copper coinage during these reigns was much less fixed. It generally consisted of halfpennies or farthings. Five-guinea and two-guinea pieces were not coined after the reign of George II., and in the course of the reign of George III. a twenty-shilling piece was once more introduced, bearing the older name of sovereign.

The only coins struck subsequent to the reign of James II. of Charles II. which are of interest to the historian are those issued in Ireland, by the authority of James II., after his abdication of the English crown.

The King began first, in order to meet his pressing necessities, to strike bronze (or gun-metal) sixpences. Subsequently he issued shillings, half-crowns, and crowns in the same metal. The value of these pieces was of course a purely sictitious one, the real worth of a crown being no more than a penny, and the loss to the nation when the money was recalled by William III., and paid for at its actual value, was very great, It was found that the total issue amounted nominally to £22,489, of which the actual value was £642.

The filver coins of Anne, made from the treasure seized in the Vigo Bay expedition, and in consequence marked with the word vigo; the coinage of George I., marked with the letters

s s c, because struck from silver surnished by the South Sea Company; and that of George II., with the word LIMA, because made from treasure which had come from thence, are worthy of a passing notice.

The copper coinage of Queen Anne confifted of a limited number of farthings struck in the year 1714. Several patterns for farthings were likewise made in this and the preceding year. They would scarcely claim mention here, but that through some unexplained cause a ridiculous notion has gained currency that these pieces are of immense value. Their real value is from 10s. to £1, if in fine condition.





CHAPTER VI.

EARLY ORIENTAL COINS.

HI

HE art of coinage was, as has been already pointed out, of Oriental invention. The first coins seem to have been issued at about the same time,

the feventh century B.c., by the Lydians in the west of Asia, and by the Chinese in the extreme east. When the Persians under Cyrus conquered Lydia Persia. they adopted the useful art of coinage; but chose a fimpler fystem than the Lydian. If we exclude money issued by Greek cities under Persian rule and by Persian satraps on the occasion of some military expedition, there were in use in the length and breadth of the Persian Empire but two classes of coins-the gold daries and the filver figli, or Daries and shekels. The daric bore on one fide as type a figure of the King shooting with the bow; on the other fide a mere punch-mark or incuse: it weighed rather more than a fovereign, and was of almost pure gold. The shekel was of nearly the same fize, and ftamped with the fame type; but was

only two-thirds as heavy; in fact, almost exactly of the weight of a shilling. Twenty shekels were equivalent to a daric. It is interesting to find the equivalents of pounds and shillings circulating throughout Western Asia at a period so early.

Until the Persian Empire fell, darics and sigli were probably the only officially recognifed currency between the Halys in Asia Minor and the borders of China. Other coins were, however, struck in some places. The Greek cities of the coast were not allowed to iffue gold coin; but the Persian rulers did not interfere with their autonomous iffues of filver and copper money, which bore types appropriate to the striking cities. And fome of the fatraps of the Persian King were allowed, more especially on the occasion of military expeditions, to iffue filver coins, the types of which curiously combine Persian and Greek mythology, one of them, for instance, presenting on one fide the figure of Hormuzd, on the other that of Zeus. And there were certain states which enjoyed, among other privileges of partial autonomy, the right of striking coins. Such was the Lycian league, confisting of most of the cities of Lycia, all of which impressed on one side of their money a circular three-membered fymbol, which most writers consider to be of solar meaning. And fuch were fome of the kingdoms of Cyprus which were faved by the intervening fea from complete subserviency to the Persian Empire, and the coins of which bear Greek legends written in

the curious Cyprian character, of cuneiform appearance.

It is a curious fact that coinage in Phoenicia, Phoenicia one of the most commercial of ancient countries, should have been late in origin, and apparently not very plentiful. There are, in fact, no coins of earlier period than the third century which we can with certainty attribute to the great cities of Tyre and Sidon. Some modern writers, however, consider that many of the coins generally classed under Persia—notably those bearing the types of a chariot, a galley, and an owl respectively—were issued by those cities in the fifth and fourth centuries B.C. But it is certain, in any case, that the Phoenicians were far behind the Greeks in the art of moneying.

With the invasion of Persia by Alexander the Successors Great came a great change; and all the ancient ander. landmarks of Afiatic government and order were fwept away. During the life of Alexander the Great the coins bearing his name and his types circulated throughout Asia; and after his death the same range of currency was attained by the money of the early Seleucid Kings of Syria-Seleucus I., Antiochus I., and Antiochus II., who virtually fucceeded to the dominions of the Persian Kings, and tried in many respects to carry on their policy. Of these monarchs we possess a fplendid feries of coins, beginning with Seleucus, the general of Alexander, and going down to Tigranes. Their features are thoroughly familiar to us, and by the help of their portraits we can

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judge more satisfactorily of their appearance in history as recorded by Justin and Appian. At sirft their rule extended from the Aegean Sea to the great desert of Gobi; and their coins were issued by numberless mints throughout Asia, and copied by the barbarous tribes of the Chinese and Indian frontiers.

In the reign of Antiochus II., however, the

Beginning of Oriental Coinage.

Syro-Greek kingdom began to fall to pieces; and with its decay Oriental coinage, as opposed to Greek, may properly be faid to commence. About B.C. 250 the Greek fatraps of the wealthy provinces of Bactria and India became independent; and the Parthian Arfaces raised the standard of a fuccessful revolt on the fouthern shores of the Caspian. In the next century fmaller kingdoms arose in Arabia, Armenia, and Mesopotamia; and the Jewish people wrested their independence from the hands of Antiochus Epiphanes. In the far East rude tribes of Sacae and Huns from the borders of China swept down on the eastern provinces of the Persian Empire, and founded dynasties which seem, however, to have soon passed away.

I shall not speak of Asia Minor on the west, for that district was dominated by Greek and Roman influences; nor of China on the east; each of these regions is treated of elsewhere in this volume. The vast space between these two extremes may be divided into three regions:

(1) Armenia, Syria, and the country to the west of the Tigris and the Caspian; (2) Central Asia;

(3) India and Afghanistan. We will speak in turn of the coins of the two former regions, during the whole period which elapsed between the break-up of the Syro-Greek kingdom and the conquering spread of Islam—that is to say, from the third century before, until the eighth century after, the Christian era. India is reserved for a separate chapter.

The earliest coins which we possess which belong distinctively to Central Asia are those recently Central discovered in Bokhara, bearing the name of Andragoras, who must have been a revolted Greek satrap of Parthia or Media.

In the course of the second century the Par-Parthians. thians, under their great King Mithradates, occupied all Mid-Asia, or rather gained a fort of lordship over it, and defended it for centuries from the attacks of the Greeks and Romans on the one fide, and of the Huns on the other. Parthian filver coins confift of two distinct classes regal and civic. The regal coins are of filver, of the weight of an Attic drachm, 60-65 grains, and bear during the whole of Parthian history uniform types—the head of the ruling King on one fide, and on the other the first King, Arsaces, seated, holding a bow. The civic coins were issued by the semi-Greek cities of Persia and Mesopotamia. They are four times as heavy, and present a greater variety of type. Subfidiary copper pieces accompany each feries.

As the Parthians were conftantly at war with the Syro-Greek kingdom fo long as it lasted, it may at first surprise us to find that the legends of the Parthian coins, except in the case of a few of the latest, are in Greek. The date of them is indicated by the increasing complexity of these legends as time goes on. All the fuccessors of the first Arfaces keep his name as their dynastic title, just as all the Kings of Egypt are styled Ptolemy, and the Roman Emperors Augustus: but they add to this dynastic name a constantly increasing number of epithets. In fact, the number of these epithets which are to be found on a coin is usually the readiest means of affigning its date. The earliest pieces bear only the legend 'Appakov or βασιλέως 'Αρσάκου; but already the fecond King Tiridates assumes the title of Great King, βασιλεύς μέγας; his fuccesfors add a variety of epithets, θεοπατώς, έπιφάνης, εὐεργέτης, and the like, until, under Orodes the Great, we reach the formula βασιλέως μεγάλου Αρσάκου εθεργέτου δικαίου έπιφάνους φιλέλληνος, which remains usual until the end of the dynasty. The last-mentioned title, Philhellen, is interesting, and records the fact that, at all events after the fall of the Syro-Greek kingdom, the Parthian Kings were anxious to fecure to themfelves the goodwill of the femi-Greek population which dwelt in many of the large towns under their rule.

The title of "Great King" was not in the style of the Parthian monarchs a mere parade or an unmeaning phrase. It signified that he was master of a number of under-kings or satraps, who ruled under his authority the various districts

of Central Asia, and in comparison with whom he might well be called great. Some of the rulers adopt the alternative title, "King of Kings," which has much the same meaning. The coins supply us with full and trustworthy information as to the dress and armour of those Parthian horsemen who more than once spread the terror of their name as far as Rome.

The great cities of Mesopotamia, such as Charax and Seleucia on the Tigris, in all probability issued the large coins already mentioned. The type of these is more varied. Before



AN EARLY PARTHIAN KING.

the time of Orodes it is like that of the regal money; but after that time it usually represents the Parthian King feated, receiving a wreath either from the goddes Nike (Victory), or from Pallas, or more often from a City personified in a semale deity who holds a cornucopiae. The head of a personified City appears on the copper pieces which go with the civic coins. Both silver and copper bear a date, the year in which the coin was struck according to the Seleucid era, which begins in B.C. 312; sometimes even the month of that year. We thus gain most valuable means of

checking the dates of the events of Parthian history, at all events of the accession and deposition of the Kings. Once in the series we have a portrait of a woman, Musa, an Italian girl presented by Augustus to Phraates IV., who made so good a use of her talents that she persuaded the King to declare her son Phraataces his heir, and reigned in conjunction with that son until he lost his life in a revolt. She wears a jewelled head-dress, and is clad in Oriental splendour.

The district of Persia proper seems to have enjoyed partial independence in Parthian times; and we may seel justified in assigning to this district a long series of small silver coins which are usually called sub-Parthian; bearing on one side the head of a king, on the other usually a sirealtar, and inscriptions in Pehlvi characters, which have as yet been very impersectly read.

Sassanian Dynasty. About A.D. 220 the princes of Persia revolted against their Parthian masters, and succeeded in wresting from them the supremacy of Asia. A great Persian dynasty then arose, beginning with Artaxerxes or Ardeshir the Sassanian, and ruled the East until the rise of Mohammadanism. The coins of the Sassanian Kings present a great contrast to those of the Parthians. Their execution is far neater and more masterly, and they show in all respects a reaction of the more manly tribes of Southern Asia alike against the debased Hellenism which had invaded the cities of Western Persia, and against the barbarous Parthian hordes, who seem to have passed out of history with their

overthrow, leaving scarcely a trace on the art, the religion, or the customs of Asia.

The great bulk of the Sassanian issues is in filver, and consists of flat, well-wrought pieces, of the weight of an Attic drachm, 67 grains. There are also gold coins weighing 110-115 grains, rather heavier than the contemporary solidi of Rome, and a few copper pieces. Gold and silver coins are of similar legends and devices, and throughout the whole of Persian rule preserve an almost unchanged character. On the obverse is universally the head of the King. The various monarchs have different styles of crown and coissure, sometimes of a very extravagant character, the hair being rolled into huge balls and



ARTAXERXES I.

tusts. On his earliest coins, Artaxerxes' head is closely copied from that of Mithradates I., the greatest of the Parthian monarchs, whom the Persian King seems thus to claim as prototype and model. Around the King's head on all the Persian coins is his name and his titles in Pehlvi letters. Artaxerxes is termed the worshipper of Ormazd, the divine King of Kings of Iran. Later monarchs vary the formula; on the money of some of the latest, the mint where the coin was

iffued and the year of the reign are written in Pehlvi characters in the field of the reverse. The reverse type of all Sassanian coins is the same, the fire-altar, the symbol of the worship of Ormazd, usually guarded by soldiers, or approached by the King in humble adoration.

Western Asia.

Between Armenia on the north and Arabia on the fouth, coins were iffued during Parthian times by a number of small states which maintained a precarious autonomy against the Romans on the one hand, and the Parthians on the other. of them disappear before the revived force of the empire of the Saffanians. Armenia was, until the time of the Parthian Mithradates (B.C. 160), the feat of feveral small dynasties. We hear of Arfames, a king of Arfamofata, who received the Syrian prince Antiochus Hierax when he fled from his brother Seleucus; and of one Xerxes, who ruled in the same district, and resisted the arms of Antiochus IV. Both of these rulers have left us coins of Greek fashion, but bearing on the obverse a head of the King in peaked Armenian tiara. But Mithradates, if we may trust the history of Moses of Khoren, overran Armenia, and fet on the throne his brother Vagharfhag or Valarfaces, who was the first of a line of Arfacid Kings of Armenia, under whom the country reached a higher pitch of prosperity than ever before or fince. We possess coins of several of these Kings-of Tigranes, who became King of Syria and fon-in-law of Mithradates of Pontus, and whose numerous filver coins struck at Antioch

Armenia.

bear as type the Genius or Fortune of that city feated on a rock; of Artaxias, who was crowned by Germanicus; and of Artavasses, who was for a brief period maintained by the arms of Augustus. We also have a long series of coins in copper issued by the Kings of Osroene or Edessa, whose dynastic names were Abgarus and Mannus, and who slourished during the first three centuries of the Christian era, living in independence by no means complete, for the one side of their coin is generally occupied by the essign of a Roman emperor.

The Arab tribes to the east of Palestine at Nabathea. fome periods enjoyed independence under kings of their own. We have a feries of coins of the first century B.C. struck by the Nabathean Kings Malchus and Aretas, partly at Antioch, partly at Petra. The inscriptions and types of these coins are in earlier times Greek, and one of the Kings who bore the name Aretas calls himself Philhellen; but later the legends are written in local alphabet and dialect, and the portraits assume more of a native aspect. The short-lived Palmy-Palmyra. rene Empire, founded by Odenathus and Zenobia, and put down by Aurelian, has also left numismatic traces of its existence in money quite identical in fabric, weight, and types, with the contemporary coins issued by Roman emperors at Alexandria. Some of the effigies of Zenobia on these coins may, however, be considered fairly good portraits for the time.

Further fouth, in Arabia, we find at least two Arabia.

tribes who issued abundance of coin before the birth of Mohammad. The Himyarites circulated great quantities of imitations of the Athenian coins of various periods, and at a later age of Types of their own the money of Augustus. they feem not to have used, but they impressed on their imitations of civilized coins an inscription which identifies them as Himyarite. The people of Characene, a small district on the Persian Gulf, began in the second century B.C. a series of tetradrachms of Greek style, the general appearance and types of which are copied from the coins of contemporary Greek Kings of Syria and Bactria. The names of a feries of these monarchs. Tiraeus. Attambelus, and fo forth, together with their order of fuccession, are preserved to us by coins.

One of the most curious facts noticeable in the coins of Arabia is the frequency with which the heads of queens occupy the obverses, in conjunction with those of their husbands and sons. This peculiarity illustrates the historical fact, known from other fources, that before the days of Mohammad women not unfrequently ruled among the Arabian tribes, either alone or conjointly with fome male relative. The abundance of the known money of this country, and the purity of the metal of which it is composed, show that while the Ptolemies ruled in Egypt, a brisk trade went on between Arabia and the countries to the east and west of it. But for art the Arabs seem never to have had a taste. They merely copied the coins which

passed current most freely in their neighbour-hood.

Most people will take a greater interest in the Judaea. coins of Judaea, although none of these are very ancient, nor are they artistically pleasing. It would seem that, until the middle of the second century B.c., the Jews either weighed out gold and silver for the price of goods, or else used the money usually current in Syria, that of Persia, Phoenicia, Athens, and the Seleucidae. Simon the Maccabee





HALF SHEKEL

was the first to iffue the Jewish shekel as a coin, and we learn from the Book of Maccabees that the privilege of striking was expressly granted him by King Antiochus VII. of Syria. We possess shekels of years 1-5 of the deliverance of Zion; the types are a chalice and a triple flower.

The kings who succeeded Simon, down to Antigonus, confined themselves to the issue of copper money, with Hebrew legends and with types

calculated not to shock the susceptible feelings of their people, to whom the representation of a living thing was abominable—fuch types as a lily, a palm, a star, or an anchor. When the Herodian family came in, several violations of this rule appear. For example, we find objects of heathen cultus, such as a tripod and a caduceus; and money was even struck in Judaea bearing the effigies of men, sometimes of the reigning Roman Emperor, sometimes even of the Jewish King. Both the Agrippas are guilty of this violation of principle. The Roman Procurators of Judaea also issued coin with Greek legends, and carefully dated, so that we can distinguish the money issued during the eventful years of the rife of Christianity at Jerusalem.

Both of the desperate but unsuccessful revolts



of the Jews against their Roman masters—that in the reign of Vespasian under Simon and Eleazar, and that in the reign of Hadrian under Bar Cochab—have left a deep impression on the Jewish coin. In both periods the iffue of shekels was refumed, and Roman denarii were freely restruck by the revolted leaders with their own types and names. With these coins the Jewish money comes to an end. Jerusalem became a Roman colony under the name of Aelia Capitolina, and all money issued in that region bears witness in its types only to the defeat and slavery of the Hebrews.





CHAPTER VII.

MOHAMMADAN COINS.

N the study of Greek coins we are unceasingly fascinated by their artistic excellence and the lights they throw on the mythology of the most inte-

resting people of antiquity. Roman and mediaeval coins have their importance in showing us the fource of our monetary fystem, and possess an added charm in the many historical affociations they awake, though they feldom increase our actual knowledge of history. English coins we study because we are Englishmen, and like to know what our ancestors bartered their souls for. None of these attractions belong to Mohammadan coins. Art we should scarcely look for, since we all know that the Blessed Prophet declared that "every painter is in hell-fire," and straitly forbade the making of "flatues" (by which he probably meant idols) and images of living things, on pain of the artist's being compelled to put a foul into his creation on the Day of Judgment.

true believers have always been very cautious of representing human or even animal forms as an aid to decoration, and we shall find that it is only when barbarous Tartars or heretical Persians enter the field that figures of living things appear in the art of Mohammadan countries, and then very rarely upon their coins. The Eastern draughtsman, being debarred from the most fruitful of artific materials, took refuge in the elaboration of those beautiful arabesque designs and geometrical patterns which are characteristic of so-called Arabian work, and even turned the natural grace of the Arabic writing to account as an element in Thus, on coins, as in mosques, we decoration. find the Kufic character used as a thing of beauty, and disposed to the best advantage, where a European artist would have relegated the letters to an Calliobscure corner, and devoted all his space to the graphy head or other figure that occupied the face of the coin. It was a matter of necessity rather than of choice, but it had a good effect in developing the graceful and elsewhere little cultivated art of calligraphy.

Nor must we expect any very interesting metrological data to be derived from Mohammadan coins. Their metrology, so far as it is known, is borrowed—like most other so-called Arabian things, whether philosophical, artistic, literary, or even religious—from the more cultivated nations the Muslims conquered, and the science still rests in deep obscurity, chiesly because no one, except my

indefatigable friend M. Sauvaire, has had the patience to work fo dreary a vein. Historical affociations it were vain to call up at the fight of a Muslim coin, fince the great majority of even well-educated and reading folk are profoundly ignorant of everything oriental, except what is Biblical or Japanese. There are, perhaps, three or four Mohammadan celebrities known by name to a fair proportion of ordinary readers. "The good Haroun Al-Raschid" owes his popularity to the Arabian Nights and Lord Tennyson, and coins bearing his name, together with that of the ill-fated Vizir Jaafar, of which there are many examples in the British Museum and every other large collection, might touch a chord of remembrance; while a piece issued by the famous Saladin, though in itself uninteresting, carries upon its furface a long train of Crusading associations for the historical student. The currency of the great fighting Sultans of Turkey, the Amuraths and Mahomets, the Selims and Solimans-to adopt the barbarous kakography of Western writershas its memories, and fo have the large gold pieces, with their uncompromising declaration of faith, issued by "Bobadil" and the other heroes of the dying kingdom of the Moors in Spain. To a very few the folitary piece of gold struck by the Mamlûk Queen, Shejer ed-Durr (which, being interpreted, means Tree of Pearls), may

Coin of a Mamiûk

Queen.

Historical Associations

¹ Matériaux pour servir à l'Hissoire de la Numismatique et de la Métrologie Musalmanes; and several profound papers in the Journal of the Royal Assatic Society.

recall the fact that it was this apparently fascinating but not quite irreproachable lady who first made the pilgrimage to Mekka in the palanquin or mahmal, which has ever fince been a notable feature of the departure of the pilgrims from Cairo, and which, being inextricably confused with the Holy Carpet, severely exercised the British conscience during the triumphal ceremonies that followed hard upon the battle of Tell-el-Kebîr.

The coin in question is a good example of the Genealogirich genealogical material to be extracted from an Arabic half-guinea. On one fide, in the margin, is the profession of faith, testifying that "there is no God but God, and that Mohammad is His Prophet,"—a formula which appears on the majority of Mohammadan coins, often accompanied by other expressions of religious orthodoxy, and by sentences from the Korân. This very marginal inscription goes on to tell, in the words of the Korân, how God "fent Mohammad with the guidance and religion of truth, fo that he might make it triumph over all other creeds." Encircled by these pious words, the field shows a long string of titles, all belonging to Queen Shejer ed-Durr, from which a fort of outline of her life may be constructed. In the first place she is called El-Musta'simiyeh, which means that she was once a slave-girl of the 'Abbâsy Khalif El-Musta'sim. Her next title is Es-Salihîyeh, showing that she was transferred from the Khalif's harim to that of Es-Sâlih, the grand-nephew of Saladin, who had

fucceeded to the kingship of Egypt after the deaths of his grand-uncle, grandsather (the scarcely less famous 'Saphadin" El-'Adil), and father. Further, this coin gives her the title of "Queen of the Muslims," and "Mother of El-Mansûr Khalîl," a son who, we know from the historians, died in infancy. On the other side are the name and titles of the reigning 'Abbâsy Khalif El-Musta'sim, the Queen's former husband, round which is arranged a marginal inscription which records how, "in the name of God, the compassionate, the merciful," the coin was struck at Cairo in the year of the Hijreh 648, i.e., A.D. 1250.

Crusade of St. Louis.

This year was a very critical one for the Mohammadan fupremacy in Egypt. In 1249 Es-Salih had died, and the French army of the last Crusade, under St. Louis, was in occupation of Damietta, and already advancing upon the capital. In this position of affairs, the Slave-queen under-She concealed the death took the government. of her husband, and subdued the panic which the Frank invasion was exciting. Then the tide of fortune changed; the Bahry Mamlûks, under the command of Beybars of the lion-crest, won a complete victory over the French at Mansûrah; St. Louis and his army were made prisoners of war; and, on the death of the heir to the throne, Shejer ed-Durr was proclaimed Queen of Egypt. two months and a half she reigned alone, and then, on the remonstrance of the Khalif, first of her three husbands, at the impropriety of a woman

exercifing royal power, she affociated the Emir Eybek and another nominal colleague with her in the fovereignty. But from the first moment she took the reins of government into her hands till the day of her death, she was sovereign mistress of Egypt, let who would enjoy the name of Sultan. She made Eybek Sultan, and married him; but fhe retained the absolute authority she had held before, and when her colleague showed symptoms of independence, and feemed inclined to enlarge the circle of his affections, she had him murdered in his bath, under her own eyes. Three days afterwards "Tree of Pearls" herfelf was beaten to death with wooden bath-clogs by the flaves or a divorced wife of the murdered man.

The unique coin described above must have been issued during these two stirring months of female autocracy, of which it is the only numifmatic evidence we possess, in corroboration of the statements of the historians, which it confirms in the most minute particulars, in every detail of the long string of titles attached to the Queen's name; and it derives a peculiar interest from having been struck at the very moment when St. Louis received his final discomfiture at the hands of the infidels, and by the very Queen whose treasury was enriched by a million gold byfants, which formed the ransom of the King of France.

In the wealth of information afforded by this Wealth of Historical coin we see the real value of Mohammadan numif- Informamatics. The coins of the Muslim East do not so much recall history as make it. The student is

constantly meeting with a perfectly unknown King or even dynasty, which fills up a gap in the annals of the East. A Mohammadan coin generally gives not only the date and place of iffue, and the name of the ruler who caused it to be struck, but frequently the names of his father and grandfather, his heir-apparent, his liege-lord, and other valuable genealogical data and aids to the due understanding of the inter-relations of different dynasties: while the religious formulae employed will enable us to tell the fect to which the ruler who iffued the coin belonged, at least so far as the broad distinctions of Islam are concerned. the complete series of coins issued by every Muslim state were preserved, we should be able to tabulate with the utmost nicety the entire line of Kings and their principal vassals that have ruled in every part of the Mohammadan Empire fince the eighth century, and to draw with tolerable accuracy the boundaries of their territories at every period. Minting was ever one of the most cherished rights of fovereignty: the privileges of "Khutbeh and Sikkeh," that is, of being prayed for in the Friday prayers in the Mosque and of inscribing his name upon the currency, were the first things the new King thought about on ascending the throne. We may be confident that the right was exercised at the earliest possible opportunity, and that a prince who occupied the kingly office for but a few weeks was fure to celebrate his royalty on a coin. Shejer ed-Durr is a case in point, for the coin above described must have been struck in her brief reign of two months.

It is this monetary vanity of Eastern princes Value of that makes their coinage fo valuable to the matic Evihistorian, and indeed compels him to regard dence. numifmatic evidence as the furest testimony he can obtain. Of course it may be urged that the facts thus derived from a study of coins are not worth having; they may be absolutely true, but they relate to persons and countries concerning which nobody feels any possible interest, and even of these they tell only such meagre items as dates and chief towns, the very things we are now carefully expunging from our school-It is easy to reply that, like every currency, that of the Mohammadan East really fupplies important evidence concerning the economic state of the country by its quality and rate of exchange. But we join issue on the main question, and venture to affert that no scrap of positive historical fact is really useless, or may not at some time be turned to important ends. The Mohammadan coinage, more than any other, abounds in historical data, and when the as yet unwritten history of the East during the Middle Ages comes to be told, the author will find no furer check upon the native annalists than the coins.

If the history of the Mohammadan East were comprised in the annals of a few great dynasties, the value of the coins would not be so considerable, for we should only learn perhaps some fresh dates or confirmation of dates already known, and the mints would only be the capitals and large towns

of well-known provinces. But Mohammadan history is made up of the struggles for supremacy of hundreds of petty houses, and thousands of petty dynasts, of whose very existence we should often be wholly ignorant but for their coins. These petty dynasts struck their money at towns of which next to nothing is often known, and thus the coinage is frequently our only means of establishing the position of the smaller towns of the mediaeval East. Sometimes these small towns preserve the names of cities famous in antiquity, but whose site, save for this numismatic evidence,



GOLD COIN OF 'ABD-EL-MELIK, KHALIF OF DAMASCUS, A.D. 696.

was uncertain. Thus geographically as well as historically Mohammadan coins have a high value.

Origin of the Coinage. It took the Arabs half a century to discover the need of a separate coinage of their own. At first they were content to borrow their gold and copper currency from the Byzantine Empire, which they had driven out of Syria, and their silver coins from the Sassanian Kings of Persia, whom they had overthrown at the battles of Kadisia and Nehavend. The Byzantine gold served them till the seventy-sixth year of the Flight, when a new, but theologically unsound and consequently evanescent, type was invented, bearing the effigy of the reigning Khalif instead of that of Heraclius, and Arabic instead of

Greek inscriptions. So, too, the Sassanian silver pieces were left unaltered, save for the addition of a governor's name in Pehlvi letters. The Khalif 'Aly or one of his lieutenants seems to have attempted to inaugurate a purely Muslim coinage, exactly resembling that which was afterwards adopted; but only one example of this issue is known to exist, in the Paris collection, together with three other silver coins struck at Damascus and Merv between A.H. 60 and 70, of a precisely similar type. These four coins are clearly early and ephemeral attempts at the intro-

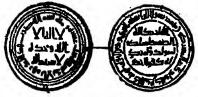


REFORMED GOLD COIN OF 'ABD-EL-MELIK, A.D. 606

duction of a distinctive Mohammadan coinage, and their recent discovery in no way upsets the received Mussim tradition that it was the Khalif 'Abd-El-'Abd-El-'Melik.' Melik who, in the year of the Flight 76 (or, on the evidence of the coins themselves, 77), inaugurated the regular Mussim coinage, which was thenceforward issued from all the mints of the empire so long as the dynasty endured, and which gave its general character to the whole currency of the kingdoms of Islam. The copper coinage founded on the Byzantine passed through more and earlier phases than the gold and silver, but it always held so insignificant a place in the Mussim

currency that we can afford to difregard it in the present brief outline.

Religious Inscriptions. Specimens of 'Abd-El-Melik's reformed coinage are here engraved. The gold and filver both bear the fame formulae of faith: on the obverse, in the area, "There is no god but God alone, He hath no partner;" around which is arranged a marginal inscription, "Mohammad is the apostle of God, who sent him with the guidance and religion of truth, that he might



SILVER COIN OF THE KHALIFATE. Struck in Andalusia, A.D. 734.

of the idolaters," the gold stopping at "other religions." This infeription occurs on the reverse of the filver instead of the obverse, while the date inscription which is found on the reverse of the gold, appears on the obverse of the filver. The reverse area declares that "God is One, God is the Eternal: He begetteth not, nor is begotten;" here the gold ends, but the filver continues, "and there is none like unto Him." The margin of the gold runs, "In the name of God: this Dînâr was struck in the year seven and seventy;" the filver substituting "Dirhem" for Dînâr, and inserting the place of issue immediately after the

word Dirhem, e.g., "El-Andalus [i.e. Andalufia] in the year 116." The mint is not given on the early gold coins, probably because they were uniformly struck at the Khalif's capital, Damascus. The contemporary copper coinage generally offers portions of the fame formulae, with often the addition of the name of the governor of the province in which the coin was issued.

These original dînârs (a name formed from the Weight and Roman denarius) and dirhems (drachma) of the Fineness. Khalifs of Damascus formed the model of all Muslim coinages for many centuries; and their respective weights-65 and 43 grains-served as the standard of all subsequent issues up to comparatively recent times. The fineness was about '979 gold in the dinars, and '960 to '970 filver in the dirhems. The Mohammadan coinage was generally very pure. The 'Abbâfy dînârs retained the fineness of '979 for many centuries, and the fame proportion of gold was observed in the issues of the Fâtimy Khalifs, the Almohades, and sometimes of the Almoravides, but the last usually employed a lower titre: At first ten dirhems went to the dînâr, but the relation varied from age to age.

The dynasty of Umawy or "Ommiade" Khalifs, Colpage to which 'Abd-El-Melik belonged, continued to Khalifate. issue their dinars and dirhems without any change until their overthrow at the hands of the 'Abbasis in the year of the Flight 132, and even then one of the family fled to Spain, and there continued both the Umawy line and coinage in the Khalifate

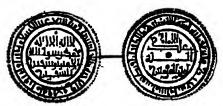
of Cordova, which lasted three centuries. 'Abbâfy Khalifs, on fucceeding to the eastern dominions of the Umawis, retained in all effential respects the coinage of their predecessors, substituting, however, for the formula of the reverse area, the words, "Mohammad is the apostle of God," thus repeating the beginning of the marginal inscription. They also inserted the name of the mint-city on the gold, as well as on the filver. Soon, moreover, the strict puritanism of the early Khalifs, which did not permit them to place their own names on the currency, gave way to the natural vanity of the ruler, and the names and titles of the 'Abbâsy Khalifs were regularly inferted beneath the reverse area inscription, often accompanied by the names of their heir-apparent and grand-vizir. Thus, for some 250 years the universal coinage of the Muslim Empire was of one simple and uniform type.

Dynastic Coinage. But with the sudden and general upspringing of small independent, or only nominally dependent, dynasties in the fourth century of the Hijreh, the tenth of our era, Muslim coins acquire their highest value. The history of the Khalifs has been carefully recorded, and their coins, though they confirm and sometimes give additional precision to the statements of the historians, do not greatly enlarge our knowledge. But when the Sâmânis in Transoxiana and Khorasan, the Sassaris in Seistan, the Buweyhis in various provinces of Persia, the Hamdânis in Syria (all adopting a predominantly silver coinage), and the Beny Tûlûn

and Ikhshidis in Egypt (who coined almost exclufively gold), and the Idrîfis (filver) and Beny-l-Aghlab (chiefly gold) in North Africa, began to strike coins after the model of those of the Khalifate, but abounding in names of local dynasts, the historical value of the coinage rifes. These dynastic coins always retain the name of the reigning Khalif in the place of honour, and this conjunction of names of Khalif and dynast will often supply the required chronological data, in the absence or the obliteration of a definite year.

With the advent of the Seljuk Turks, who fubdued the greater part of Persia, Syria, and Asia Minor, in the fifth century of the Hijreh, the coins acquire a special importance in deciding the difficult question of the territorial divisions of the various Seljuk lines; and the numerous dynasties of Atabegs or generals of the Seljuk armies, which fprang up as foon as the central power grew weak, possess a numismatic interest in their general adoption of Byzantine types on their large copper pieces. On coins of the Urtukis, for example, a petty dynasty of some crusading fame that ruled a few fortresses in Mesopotamia, we meet with not only the figures of Figures. Byzantine Emperors, but those of Christ and the Virgin, with mangled infcriptions of Christian Figures of a fimilar character also appear on the coinage of the Ayyûbis (Saladin's Kurdish house), and that of the Beny Zengy of Môsil and Syria, together with the earliest known representation of the two-headed eagle, which has fince ob-

tained high favour in Europe. But this divergence from the established theory of Islam was only a temporary and exceptional phase, due to the irruption of foreign barbarians. The contemporary dynasties of Africa—the Fâtimy Khaliss of Egypt,



"MARAVEDI:" GOLD COIN OF ALMORAVIDES.
Struck at Cordova, A D. 1103.



"MILLARES:" SILVER COIN OF ALMOHADES, MOROCCO.
Thirteenth and fourteenth centuries.

and the Almoravides and other Berber dynasties of North Africa and Spain—adhered strictly to the orthodox tradition which forbade the representation of living things, and this was all the more noteworthy inasmuch as most of these African dynasties belonged to heretical sects. Specimens of these Western coinages are shown in the engravings, in which the "maravedi" and "millares" of mediaeval chronicles may be recognised. The square shape is peculiar to North-West Africa and Spain.

Maravedi and Millares.

Mongol Coinage. In the feventh century of the Flight—our thirteenth—the Muslim world was almost wholly in the possession of foreigners. The Mongols had overrun the Eastern provinces, which had not yet recovered from the inroad of the Turks, and henceforward the monotonous (chiefly filver) currency, and irregular standards, of the various Mongol houses, such as the Ilkhâns of Persia, the Jagatay family in Bokhâra, the different branches of the



SILVER COIN OF HOSEYN, SHAH OF PERSIA. Struck at Isfahan, A.D. 1709.

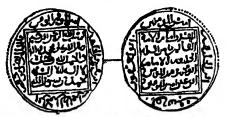
House of Timur (Tamerlane), the Khâns of Kipchak, of the Krim, etc., weary the student; till the fine issues of the Shahs of Persia and the Kings and Emperors of Dehli restore something like order and beauty to the chaos that, numis-

matically as well as historically—the two generally go together—fucceeded the terrible swoop of Chinguiz Khan. Even here, however, there are points of interest; and the long series of coins of the Khanates of the Caspian throw a valuable light upon the early history of the Russian States under the Mohammadan supremacy.

Mamlûks of Egypt. Meanwhile the Mamlúks, in their two lines— Turkish and Circassian—held sway over the provinces of Egypt and Syria, and lest many a noble monument of art and culture behind them. Their (predominantly gold) coinage, however, in spite of the representation of Beybar's lion, and some forms of ornament which are interesting to compare with the contemporary architecture, is poor and debased. Several Berber dynassies had established themselves

Berber Dynasties.

Several Berber dynasties had established themselves fince the eleventh century in the Barbary States, and continued for half a millennium to iffue their large gold pieces, refembling the coin engraved opposite. One of these, the line of Sherifs of Morocco, endures to the present day, but the Ottoman Turks extinguished the others in the fixteenth century. This clan of Turks rose into power about the fame time as the Mongols and Mamlûks. From one of ten petty dynasties that fattened upon the decay of the Seljuk kingdom of Anatolia, they became by the end of the fourteenth century rulers of all Asia Minor and a slice of Europe, and the middle of the fixteenth faw them possessed of an empire that stretched from Hungary to the Caspian, and from Baghdad to Algiers. The Ottoman currency at first confifted of fmall filver and copper pieces, bearing no very obvious relation, either in weight or style, to Ottoman the old Seljuk or the older Khalif's coinage, and for a long time they were content to use foreign gold. Mohammad II., the conqueror of Constantinople, was the first to strike gold coins, upon the model of the Venetian sequins, but of course with Arabic inscriptions. Various gold sequins or "altuns," small silver "akchehs," and copper "manghirs" constituted the Turkish currency up to the beginning of our seventeenth century. A double standard of sequins and a perfectly new



GOLD COIN OF ALMOHADES, MOROCCO. Fourteenth Century.

filver coinage, based upon the Dutch dollar, with numerous subdivisions and multiples, was then introduced, and was ever after the subject of countless modifications and degradations, until, after an unsuccessful attempt at reform by the great Mahmûd II., the modern Turkish series, approximating the monetary systems of Europe, was inaugurated by Sultan 'Abd-El-Mejîd, and is hence known as the Mejîdîyeh. A similar series, bearing the Sultan's but not the Viceroy's names, was and is in use in Egypt, and a third series, on a different basis, in Tunis. The Turkish coinage as a whole

is important in its relations with the Mediterranean currencies, and it has a certain bearing upon the history of trade in the Middle Ages. It has also a value in determining the limits of the Turkish Empire at different periods, as the number of mints is very considerable.

The true value of Mohammadan coins lies, as has been faid, in their historical data. What is really wanted is a Corpus of Mohammadan Numifmatics, which should prefent, in well-arranged tables and indexes, the refults of the coin-evidence of all the collections of Europe, and should place them at the service of historical students without compelling them to learn a difficult language and a still more difficult palaeography. There is little that is interesting in Mohammadan coins apart from their aid to history, and if their actual contributions to historical knowledge were once fummarized and tabulated, few but inveterate collectors would want to study them. I write after finishing the eighth volume of my Catalogue of Oriental Coins in the British Museum, which has been going on for the last ten years, and describes over fix thousand coins issued by a hundred separate dynasties, some of which consist of thirty or forty Kings; and I have no hesitation in saying that Oriental numifinatics is a science which is interesting mainly in its results. Those results, however, are 'of the very first importance to the historian, and in this respect Mohammadan coins may challenge comparison with any other series without fear of being found wanting.



CHAPTER VIII.

COINS OF INDIA.



HE first section of this chapter deals with the coinage of India from its commencement to the Mohammadan Conquest; the second section treats

of the coins of the foreign dynasties of Islam who ruled in Northern India.

The earliest coinage of India is, like the earliest works of Indian art which have come down to us, purely Greek. To trace the gradual absorption of Greek language and art by those of the older inhabitants is a possible and very interesting employ-One of the most important and interesting of all numifinatic feries is that of the coins issued Greek on the borders of the Oxus and the Indus in Kings. the ages fucceeding the revolt of the Eastern provinces of the Syro-Greek Empire in the reign of Antiochus II., about B.C. 250. The earliest rulers of the revolted regions were Diodotus and Euthydemus, followed in the fecond century by Antimachus, Eucratides, Menander, and a bewilder-

ing crowd of kings with Greek names, whose coins have reached us to testify, in the absence of all historical record, to their wealth and splendour, their Greek language and religion, their skill in art and the wide extension of their conquests. The number of these rulers is so great that we must give up the hypothesis that they succeeded one another in a single royal line; rather would it appear that they belonged to a number of different, probably rival, dynasties, who reigned in different



ANTIMACHUS, INDIAN KING. About B.C. 150.

parts of Afghanistan, the Panjab, and the Indus valley. Of all these powerful monarchs there is scarcely a trace in history; their cities, their palaces, their civilization, have entirely perished; their coins alone survive. Hence, while in the case of Greece and Rome coins are aids to history, in India they contain all the history we can hope to recover. And by degrees, as the number of our coins increases, so that we can form wide generalizations, and as the spots where the pieces of different sorts are found are more scrupulously recorded, we may hope to be able to form an idea of the history of Greek India. At present we are

far from being in so fortunate a condition; all that I shall now attempt is to gather from the coins a few general indications.

The coins prove that Greek rule in India went on spreading east and south during the second century. Greek Kings ruled even at the mouth of the Indus, and as far as the Ganges. civilization, or at least that of their courts and armies, was thoroughly Greek; the legends of their coins are at first purely Hellenic; and wellfigures of Zeus, Pallas, executed Poseidon. Herakles, the Dioscuri, and other Greek deities prove that they brought with them the religion of their ancestors. Probably there was a constantly fetting stream of Greek mercenaries towards these remote lands, who formed military colonies in them, and peopled dominant cities which occupied in India the same position which the Greek cities of Ptolemais and Alexandria held in Egypt, and the Greek cities of Seleucia, Ragae, etc., in Parthia.

In the beginning of the second century the Parthian Empire was driven like a wedge between Greek-speaking countries and the Graecized cities of the Cabul valley, cutting off intercourse between the two; and the Indo-Greek cities began at once to languish, and their inhabitants to become more and more barbarized. We can trace the whole process on coins. Eucratides and his successor Heliocles introduce the custom of adding on the reverse of the coin a translation in Indian of the Greek legend of the obverse. And under some of the Kings we find traces of the barbariza-

tion of Greek divinities, as when on a coin of Telephus we find strange outlandish figures of Helios and Selene, when on a coin of Hippostratus



we find a barbarous imitation of the Greek Genius of a city, or when on coins of Amyntas we find a divinity wearing a Phrygian cap from which flames or rays iffue.

Hermaeus, who may have reigned late in the first century B.C., was the last of the Greek Kings of Cabul. During his life came the deluge: hosts of Sacae, Ya-chi, and other nomad tribes from the borders of China swarmed down upon the devoted Greek kingdoms of the East and completely overwhelmed them. But these barbarians adopted,

Scythic Kings.



HERAUS, KING OF THE SACAE.

like the Parthians, fomething of the civilization of those they conquered. The coins of Maues, Azes, and others of their Kings bear Greek in-

scriptions, and the figures of Greek divinities, and conform in most respects to Greek usage, so that but for the barbarous character of the names of these Kings we might have supposed them to be of Greek descent.

The powerful and wealthy Scythian Kings who ruled in North-western India in the second century of our era-Kadphises, Kanerkes, and Ooerkeshave left us a wonderful abundance of remarkable coins, which are fometimes found in India together with the aurei of contemporary Roman Emperors in the stupas or mounds which they erected over the relics of Kings or Buddhist faints. These Kings did not use issues of filver, like their Greek and Scythian predecessors, but of gold. On one side of their coins is an effigy of the reigning monarch, and an inscription in barbarized Greek, giving his name and titles. On the other fide is the figure of some deity accompanied by his name in Greek letters; and the number and variety of these types We have figures of the Greek are enormous. Sarapis and Herakles, of the Persian Mithras and Nanaia, of the Indian Siva and Parvati, and even of Buddha, who appears on the coins in the attitude of a preacher. The Pantheon of these barbarians must have been of the most eclectic character, though we know from their infcriptions and other remains that they confidered themselves Buddhists.

As early as the first issues of the Indo-Greek Rings. Kings, or scarcely later, are the first coins of native fabric. These are what are termed "punched coins." They are small squares cut out of a thin plate of

filver, and impressed with devices by means, not of a die, but of a mere punch. The figures which they bear are very various, Buddhist emblems, archaic patterns, astrological devices, each probably the special mark of some mint, and authorizing the circulation of the piece so stamped in some particular district or city.

The punched coins circulated extensively in Central India. And at the same time there passed in Western India a great quantity of imitations of the coins of Greek and Scythian Kings. The coins of the dynasty of Kanerkes, in particular, were copied through a series of centuries, art and metal alike gradually deteriorating until in place of gold we have copper, and in place of the forms of kings and deities mere shapeless blotches.

The Sunga Kings of Magadha, who reigned in the fecond century before our aera, have left us a few coins which are valuable because of their There were, however, in Northern early date. India, before the time of Mahmud of Ghazny, notably three lines of native rulers who issued coins of creditable style, and impressed with legible Sanskrit legends. First of these we may name the Gupta Kings of Kanauj. These wealthy and powerful monarchs, who feem to have been supreme throughout the whole of Northern India, issued money of almost pure Indian style, which bears types fometimes taken from Indian religious cult, as when Parvati is depicted feated on a peacock; or allusion is made to the Asvamedha, the Indian

Guptas.

horse-facrifice. The gold pieces of the Gupta Kings may be ranged beside those of the powerful Scythic Kings, as illustrative of the conslict of two civilizations, the native and the foreign.

In the district of Saurastran, or Gujarat, there began, about the first century of our aera, the issue of filver coins by the Sah dynasty. These pieces Sah Kings. are copied from those of Menander and other Greek Kings, but yet have fomething distinctively Hindu about them. The heads which they bear on their obverse are portraits of a succession of native Rajahs; on the reverse, in the midst of a rather long Sanskrit legend, is a Buddhist emblem, ufually one which is interpreted as reprefenting a facred hill erected over fome relic. Their fabric is remarkably clear and neat, and they look as if the race to whom they belonged was by no means backward in civilization and commerce. notable that the land of Gujarat is that which would be the natural entrepôt of trade between the marts of India on the one hand, and those of Rome and Egypt on the other. The Sah Kings were succeeded by a dynasty of Guptas, who issued coins of quite fimilar kind.

Very well known to Indian collectors are the Brahman Kings of coins which show on one fide a bull, on the other Cabul. a horseman bearing a spear, and which are called "bull and horseman" coins. They are of filver, and the commonest class bear in Sanskrit letters the names of certain Rajput Kings who ruled in Cabul shortly before the invasion of India by Mahmud of Ghazny. The work of these is neither

purely Greek nor entirely Indian, but reminds us rather of some of the issues of Byzantium.

These are, perhaps, the most important classes of native coins of early time; but there are many other groups. For instance, we have whole series of coins issued by the Kings of Kashmir and of Ceylon; and in the mist which hides early Indian history we can make out vaguely the forms of kings and dynasties which fast succeeded one another, or carried on war and commerce fide by fide. The majority of these rulers issued coin; and by flow degrees the few workers who have given attention to Indian numifinatics are beginning to identify and arrange the multitudinous coins struck by them, a process which may in time bring us valuable evidence as to the divisions and the history of early India. But as yet comparatively little has been afcertained, and still less published; and our readers would only be fatigued by a list of dynasties as to which we have no information, and rulers whose names survive only on the money which they issued, or in some bare dynastic list.

Mohammadan Coinage.

The Mohammadan coinage of India possesses the same merits and defects that have already been affigned to Mohammadan coins in general. We must not, as a rule, expect to see the triumphs of the engraver's art upon the face of the Indian Inscriptions, and nothing but inscriptions, form the chief interest of the Indian coins of the Muslim period; and to these inscriptions belongs the principal value of the study of such

There is also the interest attaching to metrological peculiarities, which cannot be touched upon here, but of which the curious reader may obtain a thorough knowledge by an infpection of the works of Prinsep and Thomas. But even the latter, facile princeps among living Indian numifmatists, devoted as he is to the intricate questions connected with the weights and standards of India. is ready to allow to the inscriptions the chief place among the characteristics of the coinage. value of the illustration that these inscriptions afford, as applied to mediaeval Indian annals, is greatly enhanced, he fays, "by the exaggerated importance attached by the Muslims themselves to that department of the conventional regal functions, involved in the right to coin. Among these peoples, the recitation of the public prayer in the name of the aspirant to the throne, associated with the issue of money bearing his superscription, was unhesitatingly received as the overt act of accession. Unquestionably, in the state of civilization here obtaining, the production and facile dispersion of a new royal device was fingularly well adapted to make manifest to the comprehension of all classes the immediate change in the supreme ruling power. In places where men did not print, these stamped moneys, obtruding into every bazaar, constituted the most effective manifestoes and proclamations human ingenuity could have devised: readily multiplied, they were individually the easiest and most naturally transported of all official documents; the veriest fakir in his semi-nude costume might carry the oftenfible proof of a new dynasty into regions where even the name of the kingdom itself was unknown. In short, there was but little limit to the range of these Eastern heralds; the numifmatic Garter King-at-Arms was recognised wherever Afiatic nations accepted the gold, and interpreters could be found to defignate the Caefar whose 'epigraph' figured on its surface. So also on the occasion of a new conquest: the reigning Sultân's titles were oftentatiously paraded on the local money, ordinarily in the language and alphabet of the indigenous races, to fecure the more effective announcement that they themselves had passed under the sway of an alien suzerain. Equally, on the other hand, does any modification of, or departure from, the rule of a comprehensive issue of coin imply an imperfection relative or positive in the acquisition of supreme power."1

Copper Currency. The first important fact to be noted about the Mohammadan coinage of India is that while the gold and silver were generally more or less adaptations, assimilated to ancient Indian standards, of the dînâr and dirhem which prevailed over the whole empire of Islam, the copper currency retained as a rule its Indian character, and preserved those local characteristics which it possessed before the invasion of the Muslims. In other words, the coins most in request were lest in the form which was best understood by the people who used them, while the less frequent gold and silver, the Court currency, received the impress

¹ Chronicles of the Pathan Kings of Debli, p. 2.

of the ruling religion. So we find the conquering Mahmûd of Ghazny, the first Muslim to fnatch any part of India, issuing copper coins with Hindu characters such as the people of the Panjab would understand, and with the image of the Bull Nandy, facred to Hindus, but repugnant to Mohammadans, while his filver coins retain all the puritanical plainness that belongs to orthodox Islam. Mahmûd's successors, the dynasty of Ghaznawis or "Ghaznevides," who established themfelves at Lahore, continued to mingle this native coinage with their imported formulas of faith. The fucceeding dynasties adopted the same principle, and admitted the Bull and the Chohan or Cabul horseman to a place beside the profession of faith in one God; and we may state as a general fact that the common copper, or more frequently billon, currency of India, under Mohammadan rule, remained Indian and local, and retained the old symbols and characters of Hindustan.

The most important Mohammadan dynasties of Muslim Dynasties. India were the fo-called Patans of Dehli, with the fubordinate but often independent line at Bengal, who reigned over most of Northern India from the end of the twelfth to the middle of the fixteenth century of our era; and the Moguls, who were the fuccessors of the famous Timur or Tamerlane, and following the Patans extended their sway over a still wider area, from the middle of the fixteenth century to the well-remembered days when England set an Empress in the place of the

great Mogul. These two great houses really fill up the chronology of Mohammadan numifinatics in Hindustan, but by no means exhaust the geography. The number of smaller dynasties, native or Muslim, who struck coins either in their own characters, or, more rarely, the Arabic style, is legion. Among the more important of these may be mentioned the Bahmany Kings, who ruled the greater part of the Dekhan, from Kulbarga, (which they re-christened Ahsanabad, or the "Most Beautiful City,") from the fourteenth to the fixteenth century; the Kings of Jaunpur, Mewâr, Malwah, and Gujarat, who fprung into independence on the weakening of the central power in the fourteenth century, and generally lasted till the great annexations of the Mogul Emperors Baber and Akbar in the fixteenth.

Patans.

The Patans and Moguls, however, may be felected as the Mohammadan coins of India par The Patans introduced a gold and excellence. filver coinage of fingular purity and equal weight in either metal (about 174 grains), with often identical inscriptions, called the Tankah, which the Moguls afterwards converted into the gold mohr and filver rupee, which are so familiar to readers of Indian history. The inscriptions of the Patans are in Arabic, as a rule of flight pretenfions to calligraphic excellence, but clear and folid, and prefenting the usual statistics of the name of fovereign, of mint, and date, with fometimes a reference to the faineant 'Abbasy Khalifs who had been fet up in Egypt by the

Mamlûks on the destruction of the Khalifate at Baghdad by Hulagu Khán. Beyond fome curious posthumous issues and this homage to a decrepit Khalifate, there is little that is particularly interesting to any but metrologists and professed numismatists in the Patan coinage. One fovereign, however, possessed a genius for innovation, and his coinage presents not a few features of interest. This was Mohammad ibn Moham-Taghlak (A.D. 1324-51), a prince whose character Taghlak. abounds in aftonishing contrasts. "Generous to profusion, an accomplished scholar, abstinent, a firm defender of his faith, and the most experienced general of his day," he was yet possessed by a ferocious spirit that knew no mercy or regard for human life, and curfed with "a perversion of intellect which induced him to allow despotism to run into infane fury at any fign of opposition to his will."1 It was his fate at first to gather the empire together more firmly and with wider boundaries than ever; and then, by the eccentricity or madness of his rule, to sow the seeds of that general difintegration which barely waited for his death before it displayed its independence in every part of the empire. Among the signs of Mohammad ibn Taghlak's eccentricity is his coinage. It testifies to his taste, inasmuch as it is infinitely better engraved than any of the issues of his predecessors; and it bears witness to his passion for novelty, since it affords illustrations of several monetary reforms, all of which collapsed

¹ E. Thomas: Chronicles, p. 202.

almost as soon as they were instituted. First Mohammad ibn Taghlak refolved to alter the standard Tankah, which had hitherto been of the uniform weight of 174 grs. for both gold and filver, and to raise the gold to 200 grs., and lower the silver to 140; but he failed to make his new standards acceptable to his subjects, and in three or four years the old Tankah had to be restored. next attempt was a much bolder flight. apparently heard of the fiduciary paper currency which Khubilai Khán had fuccessfully introduced into the Celestial Empire, and which had been imitated, with very different refults, in Persia, and he refolved to try the effects of a forced currency in his own dominions. No fraud was apparently contemplated, for the Dehli treasury was overflowing, and when the experiment failed, the forced pieces were bought in at the mint at the nominal value, without any fcrutiny for clipping or counterfeiting. This forced currency was of brass and copper, and was engraved with words meant to compel their acceptance, such as "He who obeys the Sultan, verily he obeys God," and an inscription stating it to be the equivalent of the filver Tankah; but no threats, even of fo absolute a despot as the Patan King, could commend these pieces to the people, and in less than three years they were abandoned.

Moguls of Dehli. The Mogul coins have inscriptions mainly in Persian, and are also remarkable not only for occasional eccentricity of shape, such as the ornate oblongs which Akbar issued, but for the reprefentation of figures. The zodiacal rupees and mohrs of Jehangîr are well known, with the figns of the Zodiac engraved in bold relief; but the same Emperor even went so far as to engrave a portrait of himself in the act of raising the forbidden winecup to his lips. As a rule, however, the Mogul coinage contents itself with the usual notices of names, titles, mints, and dates, and felicitous references to the monarchs' happy and



GOLD MOHR OF JEHANGIR.

auspicious reigns. Such was the inscription of Sikkeh Rupee. the Sikkeh rupee which (on a principle of frequent application at Dehli, when a king of doubtful authority sought to support himself upon the monetary credit of some predecessor) was retained by the East India Company till 1835, long after the Sovereign to whom it applied had gone to his Paradise: "Defender of the Mohammadan religion, mirror of the grace of God, the Emperor Shah Alam struck this coin to be current throughout the seven climes. Struck at Murshidabad in the year 19 of his fortunate reign."



CHAPTER IX.

CHINA AND JAPAN.



HE coinages of Eastern Asia are often the most valuable records we possess of the various nations' progress in wealth and civilization. Much of

ancient history is gathered from them, and they are fometimes the only clue to events for which historians would otherwise have to draw largely on their imaginations. In them we find historical proofs and materials—records which illustrate the political events in the life of great empires-data illustrating schemes for supplying the deficiency of metals, or avoiding the necessity of a more extenfive metallic currency. We see in China, for instance, the continued struggle of the primitive fystem of barter with the system of fiduciary money required by the enlargement of the population and the development of exchange; and we see, also, in the application of economical principles very different from those of Europe, the various attempts made by the Government to detain the

people in a mediocrity of material life (not the aurea mediocritas of the poet), where an absence of wants and desires keeps them within the range of their ideal of happiness.

These considerations, interesting to the economist and historian, are not the only elements of value in the study of the coinage, besides the bare statements of facts and dates which form the skeleton of history. The illustrations and ornamentations of the medals, charms, and tokens exemplify the superstitions, the habits and customs of the people, and make some amends for the chief desect of the coinage of the Far East, the lack of artistic excellence.

The civilized clans who bore the generic name CHINA. of Bak or "flourishing," and travelling eastwards brought to China all the elements of a culture indirectly derived from the old focus of Babylonia, had not been taught in their previous home, west of the Hindu-kush, any other currency than that of weighing metals. Their earliest traditions do not point to any other; the development of barter and the use of cowries arose from necessity, and intercourse with the indigenous tribes of their new country. The fuccession of the words employed to denote the various substitutes of the as yet undiscovered money is in itself suggestive of what took place in former times. The expression used by later historians when speaking of the early pseudo-money is pit, a character meaning "wealth, riches." We must understand from the traditions that in the time of the Great Hot Bak-ket (UrBagash of Babylonian tradition), money was metal, and that afterwards, from the time of Nak Khunte (Nai Hwang-ti, ? B.C. 2250) and his Chinese successors, it became any exchangeable merchandise. For the people of Shang and of Ts'i, pieces of silk or hempen-cloth were money; later on, in the seudal states of Ts'i and that of Kiu, knives (tao) were used as currency. During the three dynasties of Yao, Hia, and Shang (B.C. 2100-1080), gold, silver, and copper were employed, besides cloth, tortoise-shell, and cowries.

Shell Currency.

The use of shells as a medium of exchange by the ancient Chinese is a matter of peculiar interest in its antiquity, and its connection with the once widely extended cowry-shell currency. We find it mentioned at its very outlet among the newly arrived Chinese, in their earliest book, the Yb-King, where, as an equivalent of "riches," we read "100,000 dead shell-fishes." The tortoiseshell currency is also mentioned in the same canonical book. Shell-currency began under the Hia dynasty (2000-1550 B.c.), when they had relations with the aborigines of the fouth and fouth-east of their newly conquered dominion. To what extent it was carried previously to their time we know not, but we have literary evidence that, with the fuperior culture which they had brought with them, they foon gave to shell-currency a development corresponding to their higher wealth and requirements.

Traces of the use of shells as a medium of exchange have remained crystallized in the written

and spoken languages; the ideogram pei "shell" has the meaning of wealth and riches, and has been added as a filent determinative to many characters of the same class of meaning: goods, property, felling, prices, cheap, dear, stores, etc.; but it is worth noticing that the use of pei in this fecondary meaning does not appear in the earliest characters of the language. In the wonderful Geographical Survey which goes by the name of Yü the Great, and might be as old as the eighteenth century B.C., the people of the islands along the coasts of Yang-tcheu had to bring cowries as tribute. Yang-tcheu was the foutheast division of the Chinese dominion, or rather of the regions upon which they eventually extended their fuzerainty; its fouthern borders were ill-defined, but it included the modern provinces of Tcheh-Kiang, Fuh-Kien, etc. It was from the islands of that part of China that the cowries exhibited at the International Fisheries Exhibition of South Kenfington, 1883, were fent.

Cowries were not the only shells used; that of the tortoise of various species and sizes was used for the greater values, which would have required too many cowries; and a survival of the old custom has remained in the language, where the expression knei-hwo, or tortoise-shell money, is used elegantly to denote a coin. Several forts of Cypraea were employed, one of which, the "purple shell," two or three inches long, was formerly found on the shores of the presecture of Teng-tchen, north of the Shantung peninsula.

The celebrated classic of the Mountains and Seas (Shan Hai King), of which the first thirteen books have reached their bulk by an innumerable series of incorporated additions since the time of the Shang dynasty, twelfth century, down to the source that the fourth century B.C., indicates the streams and waters where the precious and variegated shells could be found; i.e., mainly in the south-east and west. And the Pen-isac classic, for which an earlier origin is claimed, states that the cowries (pei-tze or pei-tch'i) live in the Eastern Sea; that is, south-east of the Shantung peninsula.

All these shells, excepting the small ones, were current in pairs, and it is this practice which is alluded to in the following third stanza of an ode of the Book of Poetry, commonly attributed to the tenth century B.C.;

"Luxuriantly grows the after-southernwood,
In the midft of that great height,
We soe our noble lord
And he gives us a hundred pairs of Cypraea shells."

Mas She, the well-known editor of the Book of Poetry in the second century B.C., commenting upon the shell-currency, speaks of tze-pei, or purple Cypraea, but only as ranking after the seatortoise-shell, measuring I foot 6 inches, which in his time could be obtained but in Kiu-tchin and Riao-tchi (Cochin-China and Annam), where they were used to make pots, basins, and other valuable objects. We learn by this statement that the use as currency of larger shells than the Cypraea moneta had not extended outside China. But as

to China proper, the great scholar we have just quoted could hardly speak from personal experience. as the shell-currency no more existed officially in his time. Big shells were still appreciated and fought for as an object of luxury, and remained thus long afterwards. We find recorded in the Han Annals, that the Emperor Wen, in 179 B.C., having presented the King of Southern Yueh with a hundred robes, the latter, with other presents, returned five hundred of purple Cypraeae. shell-currency was, however, fading away. received a great blow a long while previously from Hwei Wen, the Prince of Ts'ing, who in his fecond year, i.e. 335 B.C., recognifing the difficulties of finding a proper supply of shells and cowries, and the rapidly increasing demand for a convenient currency, altogether suppressed The inland position of Tsing, far away from the fources of fupply, combined with the fact that metallic coins of various shapes and sizes had begun to be recognised as a more practicable medium of exchange in the other states of the Chinese agglomeration, were the two main reasons which led this ancestor of the founder of the Chinese Empire to abolish the cumbrous system of shell-currency and to adopt the more perfect system of metallic coins, already put in practice by private persons in feveral of the neighbouring states. He issued then the round copper coin, with a central square hole, Earliest and the legend pan-liang ($=\frac{1}{6}$ ounce), indicating Coinage. its value, which was afterwards imitated by the rulers of the Han dynasty, and is, in fact, the

direct and uninterrupted ancestor of the Chinese coins of the present day.

A time-honoured fystem like the shell-currency. however, could not disappear without struggling a while in out-of-the-way places, and, among a people of routine like the Chinese, could not lack supporters. It is to this confervative tendency that the country was indebted for an attempt to revive the old-fashioned currency. Wang Mang, the usurper who ruled in China (A.D. 9-23) between the two great Han dynasties, wanted, indeed, to rescind all the innovations introduced in the country by the eclipfed dynasty. Accordingly he enacted new statutes-one of which re-established a shell-currency consisting of five categories, the higher one of tortoife-shells being divided How far these differed from in ten classes. the old system we are unable to say for want of proper information; still, it is not unlikely that the discrepancies were small. But the intelligent part of the people, and the traders, objected to the revival of the antiquated system; and, in A.D. 14, Wang Mang had to cancel his former decrees. After his time we hear no more of the cowry-currency in China proper; but we trace its influence in the iffue of small copper coins, shaped, indeed, as a small Cypraea, roughly imitated by their ovoidal or pear-like form, and commonly called Dragon's-head coins and Ant-coins, or Antnose coins. Some have been found of three different fizes, with the respective legends, Liang (for 1 oz.), pan-liang (or \(\frac{1}{4}\) oz.), and Kob lub

tchu, "each fix tchus," written in a rather outof-the-way manner; but certainly, by the style of writing, issued in the last centuries before the Christian era, in Tsu, the southernmost state of the Chinese confederation.

The working of mines in China has rarely Mines. been left open to private enterprise; the authorities feem to have been afraid to leave the people free to acquire riches in that way; and as a rule they kept it for themselves, and exercised much care and moderation in its use. Strict regulations have always forbidden the extraction of metals beyond limited quantities. Recourse to the mines could take place in primitive times only in cases of inundation or other great need. We find in the fragments of a still existing work on government and legislation, by an able financier, Kwan-tze, who was a prime minister of the feudal state of Tai, in 685 B.C., an allusion to the effect of such floods: "When," he fays, "from east, west, north, and fouth, all over a furface of 7,000 or 8,000 li, all intercourse with these parts was cut off by the inundation, and in consequence of the length of the way, and the difficulties of reaching them, neither boat nor cart could penetrate thither; the people therefore relied on, and employed according to their measures, pearls and gems as the highest commodities, then gold, and, as the third and lower class, knives and cloth."

Metals in lumps were considered, since the beginning of the Shang dynasty, as a source of prosperity; they were called trinon, "spring or fource," and the name lasted till its substitution by a quasi-homonym then, in allusion to the small copper implements of husbandry used later as currency. It is from the same time that the habit of hoarding bullion originated. We read that when the Shang dynasty was overthrown by Wu Wang, the sounder of the Tchou dynasty, all the wealth accumulated by the last King, the scapegoat of the abuses and mistakes of his whole lineage, in the splendid palace called the Deer Gallery, was sacked and distributed to the people.

Tchou Dynasty.

With the accession of the Tchou dynasty (1122 B.C.), a new era opened in the history of Chinese Regulations were established to fix the relative value of all the exchangeable commodities. The honour of this institution is attributed to the great Duke of Ts'i, who in 1103 B.C. established the rules of circulating money for the nine administrative boards of finance, which had been organized previously by another famous administrator, the Duke of Tchou. From commentaries of ancient date we understand that the gold circulated in the shape of little cubes of one square inch weighing a kin; the copper in round tongue-like plates was weighed by drachms (tchu); the filk cloth, 2 feet 2 inches wide, in rolls of 40 feet length formed a piece. The great man who had so successfully introduced order and principles in matters which feem to have been hitherto left to the caprice of individuals or to local and momentary necessity (and who, by-theway, was not a Chinese, but a native of the

aboriginal tribes of the East), retired to the Dukedom of Ts'i, where he issued the same regulations as in the Middle Kingdom. We have an insight into the working of the new organization some hundred and sifty years afterwards, from a chapter of the Shu King. At the end of the reign of King Muh of Tchou, i.e. previous to 947 B.C., enactments were made for the mulcts and sines; to redeem the penalties such as branding, mutilation or death, the culprit was allowed to pay 100, 200, 500 or 1,000 hwan. The hwan was a ring of copper weighing 6 oz., and this so far corresponds to the round shape enumerated in the Record of Institutes of the great Duke of Ts'i.

The Duke Hwan of Ts'i (the fourteenth fucceffor of the former), who ruled from 685 to 644 B.C., and whose prime minister was the worthy financier Kwan-tze, of whom we have spoken above, in order to make known and accessible to the public the various weights, commissioned the Left Master of the Horses to cast some metal from the mines of the Tchwang mountain. The Duke Hwan was the leader of the feudal princes of the Chinese agglomeration, and he swayed the empire under the nominal fuzerainty of King Hwey of Tchou, and his regulations were therefore of a more momentous character than those of any other prince in his dominion. Of the same Duke tradition fays that from the bullion cast at his own command he ordered the Inner Great Officer Wang yh to carry 2,000 then to the state of Tsu, in order to purchase a living stag. What was the unit represented here by the expression then, is not stated. Should we trust the word itself, it meant a small implement of husbandry in metal, which, being frequently used for its weight and intrinsic value, became the current expression for money.

Adze Currency.

Indeed, the only obligation of weighing the metal for currency had not prevented the use of any object or implement for the purpose of exchange according to their verified weights; the choice of the tools of constant and daily use among a people exclusively occupied in agricultural pursuits naturally commended itself. Small adzes and billhooks above all were prominent by their large number and easy handling. We can readily conceive how at first the exchange of fuch tools would be accepted with facility by the people in their transactions; they could be either employed for their primeval object if wanted, or exchanged with readiness in case of need. However, there was no limit to the felection of any particular form, while the employ of metal in bare lumps was never difused. All forts of objects were made use of for exchange in early times, and their endless variety may be gathered from the following enumeration of strangely shaped moneys of old: "Those like a bridge croffwise were commonly musical-stone money; those shaped as a comb were commonly padlock money; those shaped as a half-moon were the half-moon money;" the author goes on to

mention the fish-scale money and the shell-money. Specimens of these rare shapes rarely appear in numifmatic collections, and only in casts, which are always open to fome kind of fuspicion as to the genuineness of the original used for moulding. We do not know how far the regulations of the great Duke Wang, and those of his later successor. Duke Hwan, limited the variety of shapes; but fmall implements of husbandry were those which were almost exclusively used for a long period, especially small adzes, chifels, spades, or planes. They are an interesting survival of a peculiar tool of the stone age, hitherto found nowhere else than in South-Eastern Asia. While all the hitherto found implements of this rude stage of industry are limited to a few types which present only slight variations in whatever country they are excavated, the type we are speaking of is an exception. name, "fhouldered-headed celt," is pretty well descriptive of its shape, which is closely imitated in the bronze implements of China used for currency. The only characteristic of the stone antecedent, which has disappeared because of the thinness of the metal, consists "in the edge being ground down on one side like a chisel, instead of on both fides like an axe, as is usually the case." The shouldered-headed celts are generally found in the Malayan peninfula, in the lower part of Burmah, within the provinces of Pegu and Tennasserim; they have been found at Chutiâ Nâgpûr, in Central India; and quite lately at Semrang Sen (fouth-west of Lake Tanli-Sap), in Cambodia.

Weights and Implements. Thus we can trace, up to the administration of Kwan-tze, a twofold development in the history of Chinese moneys. Besides the weights properly so-called, whatever may have been the occasional employ made of them, arose the custom of casting small implements, which for convenience were used in exchange, of a regular shape and approximate weight; and gradually, as a natural sequence of that system, came the practice of having them inscribed with the name of the place or city where they were cast and put in circulation.

Ring Weights. The fystem of ring-weights, which may, perhaps, be traced to an Egyptian source, was continued down to the foundation of the Chinese Empire, when it was slightly modified into the pattern still in use in the present day. When King Hwei Wan of Ts'in, the suture conqueror of the whole of China, wanted to throw over the still surviving use of cowry currency, in 338 B.C., he ordered ring-weights to be cast, of which specimens are found. Those hitherto known bear the inscription of their weight, "weighing 1 oz. 12 drs.," or "1 oz. 14 drs.," or only "12 drs.," differences which are suggestive of a larger number of varieties at present unknown.

Relics of the other shapes of metallic currency are still in existence, though not in large numbers, in the European collections. Of the teb'ang, or adze or spade-pattern, we know by actual specimens that some were cast specially for the purpose of currency; for they are too light to have been intended for practical work. Some do not bear

any inscription whatever, but usually they are inscribed with the name of the town where they were cast; this custom was of course of later introduction, when some tool-shaped objects were Leaf cast in large numbers, without a view to their use as implements, or in smaller fize than was required for industrial purposes. These pseudo-coins were inscribed with the name of the place or city, and they were commonly called flip-weights, or leafweights, or helping-weights, flips or leaves. They were not issued by the governments, but by private Specimens, with the indication of 2 individuals. Kins, I Kin, 1/2 Kin, and of proportionated fizes. bear the names of the cities of An-yü, Yü, Shanyang, Liang, etc. Though a private business, the central government feveral times attempted to Thus King Tchwang of Tsu, who modify it. ruled in his principality from 612 to 589 B.C., vainly endeavoured to create a nominal currency by reducing to the value of units the larger pieces actually worth several units; and a similar failure attended in 523 B.c. the issue by King, the ruler of Tchou, of large pieces (hitherto unidentified), intended to superfede altogether the small ones in circulation, which the King fancied were too light.

During the ages following, which are known Period of as the Period of the Contending States, money the Contending was multiplied at a great rate in the Chinese States. agglomeration. The confederation of the various states, after having lasted several centuries, had ceased to exist, and each of the principalities was fighting for fupremacy over the others; and

in some of the states the fight was in fact a struggle for life. After some two centuries of incessant wars, seven stronger states survived, only to be sinally subdued and absorbed by the most powerful of them, the western state of Ts'in, the ruler of which established the Chinese Empire in the middle of the third century, and proclaimed himself first Emperor in 221 B.C.

Knife Money of Ts'i.

For numifimatics, the state of Ts'i during this period of contention is far the most important. The most widely known currency of Ts'i at that time is the knife-money, which confifted in a fort of billhooks, some seven inches long, curved, and the handle terminating in a ring. The shape was that of an implement of husbandry in bronze, of which a rude specimen is exhibited in the Chinese Gallery of the South Kensington Museum. The state of Ts'i was one of the most powerful of the Chinese states: it rose in 1122 B.C., and was one of the last which resisted the ever-growing state of Ts'in, as it was not subdued before 224 B.C. It covered what is now a large part of Northern Shantung and Southern Tchih-li, and always exercifed an important influence in the empire. We remember that the financial Institutes of the Tchon dynasty were established by the first Duke of Ts'i. The population of this region has been conspicuous for its intelligence and boldness; and in the She-King the praises of female beauties are all fung for ladies of Ts'i. The merchants of Ts'i, with their enterprising tendencies and the incitement of the fea-trade, always displayed a daring

which proved most useful to the progress of their countrymen. This interesting feature is revealed to us by their knife-coinage, which gives proof of the extent of their commercial relations. The legends of the knife-coins bear positive testimony to the associations which existed between several towns of the Ts'i state, among themselves, as also with towns of other states. We do not know by whom these issues were really made, whether they were cast by order either of the communities in partnership or otherwise, or of associations of



KNIFE MONEY.

traders independent of the communal administration.

The knife-currency did not outlive the submission of the states of Ts'i and Wei and their absorption by that of Ts'in, which started a new currency. It ceased to be recognised as the ordinary money, and took resuge in out-of-the-way places outside the borders of China. Though we have no intermediary proof of its continued existence, for lack of information we cannot help connecting with it and considering as a survival of the old practice, still existing in the present century among the Khamti and Sing-Pho tribes on the south-west

borders of China, of using small square iron dhas or knives as currency. The very name of these dhas is obviously connected with the Chinese tao or knife-money, and speaks for itself.

Leaf Money.

A fort of descendant of the older weights, known as flips for weight, or leaf-money, received a greater development than the knife-money. were too large to be the common and popular medium of exchange in a country where the exigencies of life were fo small and so cheap that every man needed 1,000 pieces of money or a little more a year; the equivalent of which in our money of the present day should be about eight shillings, which was a sufficient income for a man in China in the third century B.C. In the second half of the fourth century, the King of Tchao (a state to the fouth of the modern Tchih-li and Shan-si provinces) granted to Tchang-y the use of faddle-money: another name for leaf-money. All the leaf-money of that period may be claffed in two divisions, one with square, and the other with pointed feet. They bear on the obverse the name of the place where they were issued, and generally on the reverse a serial figure. The twenty and odd towns whose names occur were scattered all over the various states, but were mostly situated in the states of Ts'i and Wei. These two states fought to the last against their absorption by the powerful state of Ts'in; it is clear that the multiplication of their money during that period of warfare was for the purpose of helping and maintaining their struggle. Their rude workmanthip, and the simplifications of characters drawn by ignorant hands, exclude any possibility of their being the produce of a state coinage. The signs of the legends are abbreviated so loosely, in desiance of all principles of orthography, and they offer so many variants, that we may be sure that they are the work of private individuals among the people.

The leaf-money did not die out altogether with Gold the foundation of the Chinese Empire; it lingered in obscure corners, and was not extinguished by the state currency issued by the Ts'in dynasty.

Of the early gold currency we have very little to fay. It could not be in frequent use in a country where life was so cheap, and it was restricted to the purchase of jewels or presents from the princes and wealthy people. Except in the sinancial arrangements of the Tchou dynasty as established by the great Duke of Ts'i, we hear only of one historical instance of the use of the 1 inch cube of gold, or kin, weighing one pound, which had been made the standard.

In the fourth century B.C. we read of an yb of gold, but we know nothing more of it. It was probably a weight of precious metal in the lump. Under the Ts'in dynasty, the yh was the unit for gold, and it was then equal to 20 liang in weight. When the Han dynasty arose, the Ts'in institutions were revoked, and the old cubic inch of gold or kin was again the unit as under the Tchou dynasty. A specimen of this curious money exists in the Cabinet des Médailles, at Paris,

and a great scholar, Ed. Biot, has tried (but in our opinion unsuccessfully) to ascertain by its weight the standard of the ancient Chinese.

STATE COINAGE.

Ts'in Dynasty.

With the Ts'in dynasty appears the first state mintage of the central government, the lineal antecedent of the present coinage. Of the gold currency we have already faid the little that can be recorded. The copper money was round, with a square hole in the centre: "round as the sky, square as the earth." The pieces were substantially the same as those of the Tchou dynasty as far as their regular weight is concerned, and their multiples were in correct proportion to the unit; their weight agreed with that inscribed upon They were marked Pan-liang, or halfliang, equivalent to the eighth part of a kin-All that were formerly used as mediums of exchange-gems, pearls, tortoife-shell, cowries, filver, tin, etc., etc.—were no longer recognised as equivalent for currency in the official transactions. The purpose of the founder of the empire, Ts'in Shi Hoang-ti, was to effect a thorough assimilation of the various and rather heterogeneous parts of His great achievements in this his dominion. respect were, first, the substitution, for the varieties in the writing which had gradually arisen with the independence of the states, of a uniform style of writing, a fort of ideographical transcription which could be understood everywhere, despite the differences of the vernacular dialects; and, fecond, his attempts at establishing a State money. The burning of the books, which, indeed, has

deprived the world of many ancient records which nowadays would be invaluable treasures, and must therefore be deeply regretted, was nevertheless an act of political wisdom, in order to clear away the impediments by which the ultra-confervatives tried to check his steps. The new Emperor wished to withdraw, out of the reach of the literati and of the people at large, all the accumulated historical traditions, which by the numerous examples there recorded as patterns of conduct, offered too much ground for protesting against the spirit of innovation and progress which characterised his government.

The dynasty founded by this great ruler in 221 B.C. for "ten thousand years," finished in troubles and rebellions against an atrocious and tyrannical policy after only fifteen years, and was foon fucceeded by the great Han dynasty, which during four centuries, with a flight eclipse of fixteen years, ruled the empire (204 B.C. to 190 A.D.).

The Hans confidered the money of the Ts'in Han too heavy and inconvenient, and they authorized the people to cast some leaf-money; while the gold coins were again of the weight of a pound, as under the Tchou dynasty. But the small copper pieces became gradually fo thin, that indeed they deferved their nickname of elm-leaf money; and they were multiplied to fuch an extent that they loft their former value, and prices rose enormously. In order to mitigate this evil, the Empress Kao (185 B.C.) issued pieces of 8 tchus, equal in value to the half-ounce pieces (pan-liang) of the pre-

ceding dynasty; but it was found impossible to withdraw the elm-leaf money from circulation. Eleven years afterwards, the Emperor Wen-Ti, in the sifth year of his reign, tried to meet the difficulty by the issue of pieces having the same legend of pan-liang as before, but weighing only 4 tchus; and with the intention of rooting out salse coining, he let the people cast their own money. The remedy, however, was insufficient, and some uneasiness was selt by the Emperor as to the influence of two seudal and almost independent states which issued their own money at a higher standard than that of the Chinese Empire.

Counterfeiting.

The Emperor, in face of the failure of free mintage to check the counterfeiters, was obliged to forbid the people to cast their own money. Ring-Ti (156-140), the successor of Wen-Ti, was accused of having issued false gold coins; so that the people eagerly used the money introduced by the feudal state of Teng. False coiners practised their profession, and severe sentences could not stop the ever-growing evil. Wu-Ti, whose reign of fifty-four years was the most glorious of his dynasty, and whose generals carried the Chinese arms into the heart of Asia, issued, as a palliative measure, a money of real value, bearing the design of 3 tchus; but five years later it had to be suppressed again, because it was counterfeited and clipped, and pieces of 5 tchus, the standard of the dynasty, were then cast like those introduced by the Empress Kao. But all this was of

no avail against the counterfeiters, who issued such quantities of debased coin, that the genuine money nearly disappeared in some parts of the Empire, where pieces of cloth had to be used again as a medium of exchange. To face such an emergency it was decided to abolish all the then existing pieces which had a nominal value of half an ounce, but which in reality contained only 4 tchus, and to make new pieces of a weight of 5 tchus, furnished all around with a raised edge, in order to prevent the coins from being filed.

The third currency issued by order of the Emperor Wu-Ti confifted of three forts of pieces of different fize and form, made of tin and filver melted together, and of a nominal value far beyond the intrinsic. The first was round, with the design of a dragon, emblem of the Imperial dignity, weighing 8 liang, and its value was fixed at 3,000 pieces of money. The fecond was fquare, with the defign of a horse, weighing 6 liang, and worth 500 pieces. The third was oblong, with the defign of a tortoife, weighing 4 liang, and worth 300 pieces. The refult of these fiduciary issues was very unfatisfactory; and their end was fad indeed. The very year of their iffue they could no longer circulate, having been counterfeited on a great scale, not only by the people, but also by the state officials. No specimens of this fanciful mintage feem to be still in existence; and the representations of it which appear in some native books of numifmatics were drawn from the written description, and the false specimens which appear fometimes in collections were made from the drawings, for fale to collectors.

The Shang-lin Mint.

After twenty-three years spent in these unfuccessfui esfays, the Emperor Wu-Ti was at last convinced that the evil was more deeply rooted than had been hitherto supposed, and that some more adequate measures had become necessary. Accordingly, with these wise views, great changes were made in the monetary management of the Every diffrict and province was not empire. allowed, as formerly, to cast its own money; and a state mint was established in the capital of the empire, under the direction of three members of the Shang-lin, or Academy, which had been created by the same Emperor in 138 B.C. All the metallic currency formerly in use was withdrawn and brought to the Shang-lin mint to be melted and recast; and all money not issued by that mint was confidered illegal. The most skilled of the false coiners were engaged as workmen at the The money issued was that of 5-tcbu pieces, which, being very well made, remained the standard, excepting temporary mintages, during feven centuries, or until the iffue of the Kai yuen tung pao, the standard coin of the T'ang dynasty, in 622 A.D. These (5-tcbu) pieces were of the now usual pattern-round, with a square hole in the centre, fize 6 of Mionnet's scale, with a small raised edge all around. In consequence of the drastic measures taken by Wu-Ti, the counterfeiters had little chance during the latter part of his reign; and we do not hear of them during the

short rule of his successor Tchao-Ti (86-73 B.C.). However, in the long run, they proved to be stronger than the law of the land. Under the Emperor Suan-Ti (73-48 B.c.), in the years 71 and 60 B.C., it was necessary to make some official variations in the disposition of the design by the addition of a raifed edge on both fides of the square central hole. But in the reign of the Emperor Yuen-Ti (48-32 B.c.) the counterfeiting had again reached a dangerous level; the forgers were more than 100,000 in number, and proposals were feriously discussed by the councillors of the Crown to abolish the metallic currency, and substitute in its stead grain, silk, cloth, and tortoiseshell as a medium of exchange; but it was difficult to make a fudden change in money which had been for a long time in circulation. The only means of checking the counterfeiters then was to iffue from time to time new alterations, in the shape of additional lines or dots on the 5tchu pieces. We hear no more of changes in the mintage until the usurper Wang Mang, half a century later. From 217 B.c., when the Shang-lin mint began to cast money, till the beginning of the reign of the Emperor Ping-Ti (1 A.D.), the amount of pieces issued was 280,000,000,000. In the time of the Emperor Yuen-Ti (48-32 B.C.) the treasury of the Imperial palace amounted to 4,000,000,000, and the privy purse contained 1,800,000,000 pieces of money.

The most eventful period in the history of wang Chinese money is that of the eighteen years during

which Wang Mang the usurper ruled the country, first as Regent, and after as Emperor. He began

to cancel the various decrees enacted by the Han dynasty, and reverted again to the money of the Tchou dynasty, the multiple and unit pieces, or, as the Chinese say, the mother and child, weighed in proportion to each other. He also made again what he supposed to have been the pieces of Ring King of the Tchou dynasty, and he reintroduced Revival of the knife-shaped money. It is easy to judge how far these revived shapes were different from the originals when we compare the knife-shaped money of his issues to actual specimens of the older currency. The fo-called knives of Wang Mang have but the name in common with their originals; they are half as long and much thicker, while the ring at the end of the handle is replaced by the shape of a thick piece of money with rim and central square hole.

> When the usurper took actual possession of the Imperial throne (9 A.D.), he was afraid of all that would remind the people of the eclipfed dynasty. As the name of Lin, the founder of the dynasty, contained the characters kin ("metal"), and tao ("knife"), Wang Mang feared that his own knife-money would record the name of its founder (an apprehension which later on proved to be well grounded), and he decreed the abolition of the two forts of knives and of the c-tchu pieces. He substituted new forts of currency of gold, filver, tortoife-shell, cowries, and copper. Of the tortoife-shell and cowries thus revived

Knife Money. we have already spoken. The gold piece was, of course, in imitation of the ancient rule of the Tchou dynasty, and was called kin (pound), with a value of 10,000 copper pieces. In silver there were two pieces of different values based on a unit called liu (=8 liang); their difference consisted only in the quality of the silver, and their value was 1,580 and 1,000 cash. As to the shape of this gold and silver money, we know nothing, and no specimen is known to exist.

The copper money received the name of pu by a revival of the oldest name used in the state of Ts'i previously to the financial Institutes of the Tchou dynasty, when pu (or cloth) was the principal medium of exchange in this region.

In A.D. 23, the usurper Wang Mang was Revived murdered, and the fecond Han dynasty began to Dynasty. The currency of the country was in frightful disorder; the last issues of Wang Mang were no longer accepted, because they existed only in counterfeit, and the old 5-tchu pieces were in fuch small numbers that cloth, filk, metals, and rice were all used as currency, every individual making the most of them. However, Kwang Wu-Ti, the new Emperor, was not able, through the difficulties of the fituation, to cast money before 40 A.D., and the pattern then used was that of the 5-tchu pieces, the standard currency of the Han, The only modification subsequently made was the addition on the reverse of four straight strokes from the corners of the central hole to the outside rim. Some iron 5-tchu pieces had been cast during the

troubles at the end of the last reign, two being equivalent to one of copper.

Division of the Empire.

No other currency than the copper 5-tchu pieces was issued till the end of the Han dynasty (220 A.D.), and the ensuing division for over fifty years of the empire into three kingdoms, Shuh, Wei, and Wu,—except small copper pieces issued in 190 A.D. by the last Emperor, Hien-Ti, to supply the 5-tchu pieces; for which, as the necessary quantity of copper was not available, he seized many copper objects and statues, especially those of Fei-lien or Föng-pöh, the God of the Winds, who had incurred his curse.

Wd.

Four hundred years of monetary troubles and diforders had not convinced the rulers of the necessity of a found currency. The King of Wei, in the north, thought that the best means of avoiding all these difficulties was to suppress the metallic currency altogether. Accordingly he abolished the 5-tchu pieces, and ordered the people to use as currency only grain and filk. It was only opening another door to the counterfeiters, who, instead of casting bad metal, put moist grain in the bags, and wove thin and fleecy filk, so that after forty years it was necessary to return to the metal currency, and pieces of the time-honoured 5-tchu pattern were cast again and put in circulation.

Wu.

In the state of Wu, the easternmost state of the three, matters were still worse. In 236 A.D. were issued large pieces (8 of Mionnet's scale), with the legend Ta tinen wu püh ("Great money

(00"), and two years afterwards larger ones $(9^{1}/_{2})$, Ta tfinen tang then ("Great money worth 1000"), which were foon counterfeited on a smaller scale, fo that it was deemed advisable to discontinue their mintage, and to melt them for implements. In 256 A.D. was issued another mintage, the pieces whereof in the ordinary pattern were worth 100 then, as indicated by their legend, Tai-ping peh then (" 100 then [or cash] of [the period] Tai Ping"), which were of course soon imitated in a smaller fize. This is the first example of the use of the name of the reign or nien-hao in the denomination of the money. The case is worth noticing. though only sporadic examples are still found during the following centuries. Gradually the custom became more general, and later on, from the T'ang dynasty up to the present day, the issues are distinguished by the names of the years during which they were cast. Since the Ming dynasty the nien-hao, which were generally changed feveral times during one reign, have been made uniform for the full length of a reign, and to a certain extent have become identified with the ruler's own name, which is too facred to be pronounced during his lifetime.

Though the shape of the currency was pretty Later Ts'in well fettled, we full find fome eccentricities in the Dynasty. issues, partly due to the absence of the necessary quantity of metal. The Ts'in dynasty (265-317 A.D.), who re-united the empire under one fway, issued diminutive 5-tchu pieces (fize 2 of Mionnet's scale), and two large iron pieces (fizes 9 and 15),

worth 100 and 1,000, and so marked from top to bottom *Th peh* and *Th then* respectively, with *Yung ngan* ("Eternal peace") from right to left, denoting the name of the year (304 A.D.), when they were cast.

The Two Empires. During a period of one hundred and fifty years, the empire was nominally divided between two Emperors, though in fact it was for a while partitioned into nine different states, in seven of which the rulers had not assumed the Imperial title. Of course, money too was in great disorder, but it is worth noticing that the Tartars, who ruled in the northern part of the Yang-tse Kiang, while the lawful heir of the ancient Chinese had removed to the south, had much more sound views on financial economy than the Chinese themselves, with all their painful and costly experience.

Southern Empire. In the Southern Empire, under the Sung dynasty (420-477 A.D.), the Emperor Wen-Ti issued, in the year 430, copper pieces with a raised edge, and the design 4 tchus, which were equal in value to the old 5-tchu pieces; these pieces were hard to counterfeit, but very soon the old frauds began again. Hia Wu Ti's 4-tchu coins, with double legends (454-456), and his later 2-tchu pieces, were largely imitated, till they received derisive nicknames from the people, who called the thin ones "weed-leaves," and the small ones "goose-eye money."

At the beginning of the Liang dynasty (502-556 A.D.), in consequence of the closing of the state mints in sheer despair, money was so scarce that

it was employed only in the capital, Nanking, and In order to put an end to the its vicinity. fraudulent dealings of the money-changers, it was decided to superfede the copper money by iron Iron money, and pieces bearing the legends Ta Kih wu tchu. Ta Fuh wu tchu, Ta t'ung wu tchu, in iron were put in circulation. Ta t'ung only is a name of year, being that of the years 527, 528. But this was the folution of a difficulty by the creation of a new one. Iron could be got much more eafily than copper, and as the Government itself could not result the temptation of making large profits, in ten years the iron money fell to one-third of its intended value.

When the Tch'en dynasty (557-587 A.D.) arose, among the confusions caused by the fall of the Liang, all the iron money was discarded, and the new princes reverted to the old 5-tchu pieces, which, in respect to the still circulating "goose-eye money," had a relative value of 10 to 1.

While all these monetary troubles and wild Northern experiments were going on in the Southern Empire, more fober views and found economical principles had guided the Tartar rulers in the Indeed, their people, many of whom had fettled in China, were not accustomed to metallic currency, and continued bartering as formerly, while the Chinese themselves used the former currency. It is only the feventh ruler of the Topa or Wei dynasty (386-532 A.D.), Hiao Wu-Ti, who directed in 477 A.D. that the falaries of all the state officers should be reckoned by

money to be used henceforth in the empire, at the rate of 200 pieces of copper money, being equal to a piece of filk. The new money was inscribed Tai Ho wu tchu, or "5-tchu of (the period) Tai-ho." Fifty years afterwards false coining had impaired considerably this money, and new ones had to be cast with the legend Tung ngan wu tchu, or "5-tchu of (the period) Yung ngan" ("Eternal peace").

Sui Dynasty. Under the Sui dynasty (581-618 A.D.), who ruled again over the whole empire, attempts were made to revive the old standard pieces of 5 tchus, and new ones were cast with the new distinctive feature of a broader ring. But the innumerable issues of money which had been made in the preceding centuries in the various states, and which were locally still more or less in circulation, had caused the most hopeless confusion. The old standard was no longer trusted by the people, who were obliged in the North-Western provinces, west of the Hoang-ho river, to use money from the foreign countries of the West with which they had commercial intercourse.

Modern Coinage.

T'ang Dynasty. With the great T'ang dynasty rises a great change for the better in the metallic currency of China. As we have seen at the end of the last period, the 5-tcbu pieces, which had been the standard money for more than eight centuries, had fallen into such discredit that it was impossible even to retain the name. An entirely new money was established, bearing the legend Kai yuen t'ung pao (or "Current money of the newest

beginning"), weighing half as much again as the old 5-tchu pieces (i.e., 71/2-tchu), with a fize of 7 on Mionnet's scale. On the reverse was a nailmark, which fince then has spread all over the East. in Japan as in Corea and Annam. The origin of this curious mark is attributed to this incident: when the Under-Secretary of the Cenfors, Ngeuvang-fiun, who had himself written the characters of the legend, showed a model in wax of the new money, the Empress Wen-teh in touching it left on the wax the impression of her nail.

The new money was so good that it foon Limited fpread all over the empire, and has never been furpassed. The only reproach was that it was not issued in sufficient quantities to meet the requirements of the traders. This infufficiency led to feveral abuses. The pieces were counterfeited in a mixture of iron and tin by skilful forgers, against whose cunning the officials were powerless. The Emperor tried to abolish the new money less than forty years after its first issue, and caused the state-money to be provided with a new legend (Hien K'ing t'ung pao); but it was foon found impossible to go on with the new measure, which therefore was withdrawn. The only practicable means was to make terms with the counterfeited money, and to accept it in payment. In 666 A.D. a new money with the legend K'ien fung (the year-name) tung pao, was issued, to be accepted at the rate of one new for ten old pieces; but it foon became necessary to cast again the Kai yuen The current money always circulated by

strings of 1,000, and thus the false pieces easily escaped detection. Under the reign of the Empress Wu (684-704 A.D.), therefore, it was forbidden to make payment in pieces strung together; they were to circulate loose, that the copper, tin, and iron pieces might be distinguished at once.

Dearth of Metal.

All the efforts of the Government were of no The issue in 758 A.D. of larger money directed to be the equivalent of 50 and of 10 of the old pieces, was received with contempt by the people, because they had no intrinsic value. metallic currency was fo poor that stones for grinding rice were received as money of an intrinsic value at the rate of 1 to 10 cash. great difficulty to overcome, for the Government, was the scanty supply of copper. it had been forbidden to any individual to store up more than a fixed quantity of the precious metal, the amount in circulation had gradually diminished by the melting of the good copper pieces to make vases, implements, and Buddhist figures. In 809 A.D. private persons tried to circulate filver money by working the filver mines of the Wuling Mountains (fouth of Hunan province), but this was foon prohibited by the Government.

Confiscation of Buddhist Treasures. At last it was found necessary to regulate the use of the various metals. In 829 A.D. it was ordered that the Buddhist sigures and ornaments, instead of being made of copper, should be made of lead, tin, clay, or wood, and the girdle either of gold, silver, Persian brass, or steel blued and

polished; only for mirrors, gongs, nails, rings, and buttons, copper might be used. This restrictive measure was only the prelude of another of a more fweeping character. By the natural reaction from the extraordinary favour bestowed upon Buddhism during the previous reigns, this religion, from its excessive development and the immoderate pretensions of its devotees, came under the displeasure of the Emperor Wu Tsung, who, in 845 A.D., decreed its suppression. 4,600 monasteries and 40,000 smaller temples were destroyed: 260,500 monks and nuns were compelled to return to lay life; more than 15,000,000 acres of land were seized, and 150,000 female slaves were freed. All the copper statues, mallet-bells, gongs, and clapper-bells were confiscated to the profit of the Government, and melted to cast money of the Kai-yuen pattern in about twenty-five mints, of which the name was marked on the reverse of the This new fupply of money was received with great favour, because of the quantity of gold supposed by the people to have been mixed with the copper in the temples.

The continuation of the numifinatic records of China is a tedious repetition of all that we have feen thus far. Infufficiency in the fupply of copper, and struggles against the counterfeiters, with the additional complications of a double standard caused by the temporary casting of iron money under the Sung dynasty and of the development of the paper money, which, from small beginnings in 806 A.D., attained a paramount importance under

Yuen and the Yuen or Mongol dynasty, which cast very Ming
Dynasties fmall quantities of copper-money. The Ming dynasty had also a poor mintage. It is only the present dynasty, the Ta Ts'ing Mandchu, who issued a regular and efficient mintage. From the time of the Ming dynasty the year-names have been reduced to one for each reign, so that the legend was henceforth the fame for the whole mintage of a ruler.

Mandchu Dynasty.

Regularity, however, is fairly fecured in the issues from the mint of the Board of Finance in the capital, which are the pattern for the provincial mints; but the shrinking of the cool metal, when frequently repeated by the casting from moulds made from pieces and not from the pattern, produces fometimes a fensible difference, which is certainly not disadvantageous to some of the mintmasters. The authorized proportion of the alloys was, till 1722, copper 50, zinc 411/2, lead 61/2, tin 2; after that time the composition consisted of equal parts of copper and zinc. The obverse bears the name of the reign, read from top to bottom, and the words tung pao, or "currentmoney," from right to left. On the reverse the name of the mint in Chinese, or in Mandchu and Chinese, or in Mandchu only. There has been only one dark period in the present mintage, which for a time funk to the lowest level during the great Taï-ping rebellion. The fupply of the copper mines was stopped, and it was necessary to cast iron money, the worst of its kind that was ever made.

Silver circulates generally cast in ingots, in shape rudely refembling shoes, and for that reason called "fhoe-filver." With the exception of two unfuccessful (because counterfeited) attempts in 1835 and 1866 to cast filver dollars, the Government has never iffued filver money. In Fuhkien province and Formosa island, in 1835, a large issue of native dollars was made to pay the troops on that island; the legend was, "Pure filver for current use from the Tchang tchou commissariat, (weight) 7 mace 2 candareens." At Shanghai, in 1856, the taels, or dollars, were of the same weight and purity (417.4 grs. troy); and besides the inscription in Chinese and in Mandchu, they had an effigy of the god of longevity on the head, and a tripod on the tail, to authenticate the official origin. Gold, cast into ingots, also circulates by weight.

Private individuals have fometimes caused filver to be cast as money; but they are generally satisfied to make, with European appliances, imitations of the Mexican and old Spanish dollars which are in currency; these, as they pass from hand to hand, are punched with the seal or stamp of the owner by way of endorsement; and when the marks are so numerous that there is no room lest on the coin for more, they are melted.

The Japanese records tell us nothing about the Japan. means by which barter was carried on previous to the use of metals, which do not appear in the Empire of the Rising Sun before the fifth century A.D. These records claim to go back uninter-

ruptedly to 660 B.C., fo that, even admitting that this far-reached date has to be shorn of several centuries, there is still a long lapse of time during which regular means of exchange might have been recorded.

Earliest Issues.

In the Ko-ji-ki, or "Records of Ancient Matters," lately translated with great learning and industry by Mr. Basil Hall Chamberlain, the first appointment of a treasurer is recorded during the reign of the Emperor Tza-ho Wake, or Ri-chin, who ruled from 400 to 405 A.D., according to the "accepted chronology;" and feveral, but not all, native numifmatists of high standing attribute to his immediate fuccessor, Midzu-ha Wake, or Han-zei, in 408 A.D., the iffue of rough filver coins, flat and irregular disks, with a small round central hole bearing feveral marks of rude stars of fix lines, and sometimes undistinguishable strokes, size o of Mionnet's Mu-mon-do-sen, i.e. coins bearing scale. characters, are more often claffified among the Kitte-sen, i.e. coins issued provisionally in times of disturbances and warfare, and therefore very coarfely made, being generally cut out of a plate of metal instead of cast.

The genuineness of the next coins in date, i.e., copper coins issued in 683 and 690 A.D., has remained comparatively unchallenged. They confist in flat and irregular disks of copper, with a small round central hole; fize, 6 of Mionnet's scale; marks, 4 crosses, each in a circle.

The working of metallic mines in Japan began very late-674 for filver, 708 for copper, 749

for gold; and previous to these dates the supply of metal by foreign importations was very limited, and if wanted, it was always easy to get the copper cash from China. It is only in 708 A.D., after the discovery of copper mines, that the Japanese began to cast regularly copper coins, of the same shape as had then been common in China for many centuries; viz., round, with a square hole in the centre. The Chinese system of the year-names, in Japanese Nengo, which had been adopted fince 645 A.D., was followed in the legends of the coins. The discovery and working of copper mines was confidered fo important an event for the country, that the actual Nengo was changed into Wa-do, i.e., Japanese copper; and the legend of the coins was Wa-do-kai-tchin, which may be rendered "New precious article of Imitation the Wa-do or Japanese copper period." Japanese recognise the various issues of their coins by differences in the shape of a character, or of a stroke of a character, and so classify three issues of the Wa-do coin, all rather roughly cast, and a fourth iffue of a fuperior workmanship, imitated from the celebrated Chinese Kai-yuen coin, to which it is like in form, shape of characters, and general appearance. Fifty-two years afterwards, in A.D. 760, there were so many forged Wa-do-kaitchin in circulation, that the Government decided to iffue a new coin, which was cast, with the legend Man-nen-tsu-bo, or "Current money of ten thoufand years," in four iffues. A filver coin, worth ten of the copper ones, was put in circulation the

fame year, with the legend Dai-bei-gen-ho, "Fun-damental money of the great tranquillity."

Ten other copper coins were fuccessively issued in A.D. 765, 796, 818, 835, 848, 859, 870, 890, 907, and 958; gradually decreasing in fize and workmanship till 870, and in material afterwards. The legends are often undecipherable, and in the last coins the metal is largely alloyed with lead; in some cases they are made entirely of the latter metal. The execution was careless, and the result was a rather disreputable money. These twelve coins constitute the antique coins of the country, or, as the Japanese call them, 1 Jū-ni-hin ("The twelve kinds"). After the coinage of the latter coin, in confequence of political troubles, no copper. coins whatever were issued by the Central Government for over 600 years. Mintage in lead had begun as a fecondary currency with the iffue of 835 A.D., and down to 1302 the twelve antique coin patterns circulated in lead or in tin.

Coins in Japan.

Lead Currency.

During this long interruption in the iffue of copper coins, the Chinese cash supplied the deficiency. Coins of various dynasties of China formed the currency of Japan, especially coins of the Northern Sung, and the Ta-tchung, Hung-Wu, and Yung-loh coins of the Ming; these were largely imitated. We cannot be astonished to see them imitated to a somewhat large extent. For instance, the Chinese Sung coins of Siang-su (1008 A.D.), Tien-Sheng (1023), Kia-yu (1056),

¹ W. Bramsen, The Coins of Japan, p. 7.

Ming-yuen (1032), Tcheping (1064), Hi-ming (1068), Yuen-fung (1078), Yüen-yu (1086), Shaosheng (1094), Yuen-fu (1098), were moulded. and specimens cast and issued in quantities at Mito in the province of Fitatfu. In some cases new patterns were made, such as for the Yuenfung coin with five varieties, two being moulded from the Chinese, and three made anew, which exhibits a finish and excellence of workmanship and bronze casting far superior to its Chinese original. All these issues were made by the private Daïmios in their own estates, and not by the Central Government; the metal was bronze, from the finest quality downwards, and sometimes a very poor alloy, and indeed lead. The Yungloh (A.D. 1403) coin of the Ming was imported in not inconfiderable quantities, and largely imitated, not only from moulds of the coin itself, but also with new patterns. The device was used for gold, filver, white alloy, lead as well as for bronze, of which metal a larger coin was also issued.

With the period Ten-sho (1573-1591) com-Ten-sho mences a new era for Japan generally, as well as for its coins. Gold, filver, and copper coins began from thence to be regularly iffued. In 1587 the "Current money of Ten-sho," i.e. the coin inscribed with the legend Ten-sho-tsu-ho, was first iffued. As might be expected after the art of coining had been so neglected for centuries at the capital, this coin is not well made; there seems to have been a very limited number of copper coins cast, while filver coins of the same

defign were iffued in larger quantity, the consequence being that the former are at present much rarer than the latter. While in the twelve antique coins the characters of the legends were read $\frac{1}{3}$ the order was changed into $\frac{1}{3}$ in this new iffue and the after ones.

The Bun-roku-t/u-ho, in copper and in filver, were issued in 1502, and followed in 1606 by the Kei-tcho-t/u-ho (four varieties and two fizes), in 1615 by the Gen-na-t/u-ho, with a ferial of 1 to 30 on the reverse. The Kwan-ei-t/u-ho, first issued in 1636, presents an almost endless variety of issues, due to the fact that the coinage was continued for over 225 years, during which the device of the copper and iron coins of the Government remained unchanged, with the exception of a few coins of a higher denomination. All the copper coins issued from Wa-do up to the period of Kwan-ei, and all the copper and iron coins Kwanei-t/u-ho, excepting the large-fized iffue with wave-like lines on the reverse, are of the value of The various iffues of different fizes, cast of copper or iron, with or without inscription on the reverse, are classified to the extent of more than 1,000 by the native numifmatists.

In 1768 coins of the Kwan-ei-t/u-bo pattern were issued in brass and afterwards iron, the reverse being covered with twenty-one wave-like lines; they were to be worth 4 of the ordinary mon. The number of the wave-like lines was afterwards reduced to eleven. The last coins of

this pattern were cast so late as 1860, in iron, of two sizes, a larger and a smaller one. In 1835 a large, oval, bronze coin, having on the obverse Tem-po above and tsu-bo below the square hole, was put in circulation; on the reverse, above the hole, are the two characters To-biaku, "worth 100," indicating that the value of the coin was 100 mon, and under the hole the mark of the mint. There are two varieties, diversified by the respective sizes of the rim and of the square hole.

Finally, in 1863, was issued the last regular copper coin, with the legend Bun-Kiu-ei-bo, "Everlasting money of Bun-Kiu (period)," with eleven wave-like lines on the reverse; worth 4 mon: three varieties; also cast in iron. Besides Iron the iron coins cast by the central Government and current throughout the country, others were at various times issued by the seudal lords (Daïmios) for the exclusive use of their own dominions, or by certain chief towns. The most peculiar of this class, frequently met with in the collections, is square, with rounded corners, inscribed Sen-dai t/u-ho, Sen-dai being the name of the dominion where this pattern was cast in several issues, of which the first took place about 1782. however, fails us to speak of the various peculiarities of these seudal issues; or the iron coins cast in moulds of Chinese cast of a thousand years earlier; or the token-like pieces issued at Mito in 1866-68, with the couplet:

May your wealth be as vast as the Eastern Ocean, And your age as great as the Southern Mountains. Bean Coinage.

We can only refer to the filver-copper, or billon coinage, of which the most curious examples are the filver-bean coins, shaped, as their name fuggests, in various sizes, from a small pea to a large bean. Beginning in 1601 down to 1859, they are variously stamped; but the marks, which are made rather at random, are generally unde-In 1711, etc., they were marked cipherable. with the figure of Dai-Koku, the god of wealth, fitting on two rice bales, and holding his lucky hammer in the right hand, while the left grasps a sack of money slung over one shoulder. Each time Dai-Koku gives a blow with his hammer, the wallet he has by him becomes filled with money, rice, and other things, according to what may be defired.

Silver Coinage.

In our rapid furvey of the minor currency we have mentioned several of the regular issues of filver coins, cast on the same patterns as those in lower metals. By far the largest quantity of filver-money circulated under other shapes, viz., flat, square, oblong, plates, and lumps. Those of the first model were issued only during the last and the present centuries. The well-known fmall oblong coins in filver are quite modern, except the T-shu and Ni-shu pieces, issued since 1772. The Itsi-bu and Ni-bu pieces were issued till 1868; the former since 1846, and the latter fince 1818. The Ni-bu, of golden appearance, presents an interesting peculiarity, while the other named coins were of filver of the usual fineness; the Ni-bus were of filver, with a percentage of gold added, which was brought out on the furface of the piece after the coin was made. by treatment with acids.

Silver in lumps by weight was most likely in use a long while before the evidence of the native collections and numifinatic records begin. oldest, four inches in length, stamped with crests. stars, etc., is ascribed to the period 1570-80. In the official records we hear of an iffue of the fame kind in 1601. Those of 1605 bear all around fragmentary stamps of Dai-Koku, the god of wealth. In 1706, 1710, 1711, 1714, 1736, 1820, 1859, large filver lumps of various fizes were in circulation, and bear marks which traditions understand to have been stamped at those dates; the evidence is of a most shadowy character, and rests on the mere assertion of the native writers.

Large plates of filver of various fizes, and smaller ones like the gold Obo-bang and Ko-bang, were also issued between 1570 and 1580, but the practice feems to have been discontinued. fome provinces filver was also used in lumps, from which bits of the required value were cut and weighed.

Previous to the adoption of the European Gold Coinage. fystem in 1870, round gold coins had been very rare indeed. A gold coin of the ordinary shape, pattern, and square hole in the centre, was issued in 760, with the four Chinese characters Rai-shingki-pao as legend. One of the endless series of the Kwan-ei-t/u-bo legend, and another in imitation of the Chinese yung-lob, constitute the whole series

of the inscribed coins. Another well-known round coin is that issued in 1599 by Hide-yosi, better known under his posthumous name of Tai-kansama, the powerful general who instituted the high post of taikun. This rather small coin bears on one fide fix stamps, one central of the Kiri-mon, and on the other fide five stamps of the same, with the minter mark in the centre. The Kiri-mon, or crest of the Mikado, is composed of three leaves pointed down with three flowers (one of feven and two of five petals) above, of the Paulownia Imperialis; it differs of the Kiku-mon, or Imperial badge of Japan, which consists of a conventional pattern of the chryfanthemum with fixteen petals. and must be distinguished from the badge of the Takugawa family, to whom belonged the later Shôguns, and which confisted in three mallow leaves within a circle, their points meeting in the centre. In 1727 divisionary pieces, or itsi-bu, ni-shu, and is-shu pieces so-called, were issued round. bearing on the obverse the Kiri-mon on the upper left fide, with the examiner's stamp, and underneath, on the right hand fide, the mark of the value; on the reverse are the mint stamp and the name of the year. The ni-shu and is-shu pieces have on the reverse the name of the particular kind of gold of which it is coined. By far the commonest shape of the gold coins issued since the fixteenth century to twenty years ago was that of oblong boards, with rounded angles, excepting for the small pieces. Their denominations were the following: Oho-ban, "large plate," of

10 ryo; Goryo-ban, "5 ryo board;" Ko-ban, "fmall plate," of I ryo; Ni-bu, "two parts," of 1/2 ryo; Itsi-bu, "one part," of 1/2 ryo; Ni-shu, "two shu," of 1/8 ryo; Is-shu, "one shu," of 1/16 ryo. The largest were more than 61/2 inches in length. and the smallest 3/8 of an inch. They were stamped with the Kiri-mon in round, fan-shaped, or pentagon compartments, feverally repeated, the value, the stamp of the mint; and on the small ones is fometimes the date of iffue. Besides these stamps, the large coins often bear feveral punches of the mint-examiner, testifying to their genuineness. Fees used to be charged by the duly appointed officers of the Imperial mint or treasury for certifying the value of the large ones, or Oho-ban; and, in order to have these fees paid often, they had recourse to the ingenious device of marking them so that the marks could easily be obliterated, and the plan of writing the requisite signs in Indian ink was adopted; in consequence, the pieces were always wrapped up fingly in filk wadding and paper, and the greatest care taken in handling them to prevent the writing being defaced.





CHAPTER X.

MEDALS.



HE science of Numismatics has to deal not only with those metallic objects which have actually passed current as money, but also with the numerous

fpecimens in the precious or other metals which are defignated medals—specimens, that is to say, iffued to commemorate some personage or event, but not employed as media of exchange. application of the word "medal" to this class, in contradiffinction to coins, is a recent one: Italian and French writers of the fifteenth and fixteenth centuries use medaglie and médailles to signify coins which, being no longer in circulation, are preserved in the cabinets of collectors as curiofities. Even in the last century our own word medal was fo employed. The "medals" of the Roman Emperors, to which Gibbon often alludes in his notes to the Decline and Fall, are, of course, what we now know as coins; and Addison's Dialogue upon the Usefulness of Medals is, for the most part,

The word
" Medal."

a treatise on Roman Imperial coins. The Shilling of Elizabeth, which is made to relate its adventures in the Spectator, observes that at the Restoration it came to be "rather looked upon as a medal than an ordinary coin." In the present chapter we shall of course employ the word "medal" in the fense which it has now generally acquired.

An inquiry into the history of the medal need not lead us far back into antiquity. The Greeks had absolutely no distinct class of objects corresponding to our medals, while even their coin-types were only in rare cases of a commemorative character. The coin-types of the Romans, indeed, are often directly allufive to historical events, and the Romans issued a special feries of metallic objects not intended for circulation as currency; but even these latter pieces (known to modern numifmatists as the "Roman medallions") can hardly be confidered as the actual prototypes of the modern medal. Between the latest Roman medallions, which are of the time of Honorius, and the first productions of the famous Italian medallists of the fifteenth century, there is a great chasm, and the medals of the new Italy are in no fense the descendants of the old. The first Italian medals must, indeed, be reckoned Italian as a new artistic product of their time: the processes by which they are made are not those of the older coin or medallion engravers, and they are, at first, entirely unofficial in character. It is only by degrees that the medal becomes more or less official, and is employed to comme-

morate important public events. The earlier specimens of Italian workmanship were not intended to commemorate events or even to do honour to illustrious men after their decease; they were destined rather to serve the purpose of the painted portrait or of the modern photograph. The noble families of the time welcomed with a natural eagerness this new art, which not only portrayed their seatures with all the power of painting, but which rendered them in a material which itself was aes perenne, and which was readily available for transmission from friend to friend.

First of these great creators of the medal, in time no less than in merit, stands Vittore Pisano of Verona, whose artistic activity in this direction

belongs to the ten years 1439-1449. Pisano is known also as a painter (his medals often bear the signature "Opus Pisani pictoris"), and it is, no doubt, a circumstance having an important influence upon the beginnings of modern medallic art that he and most of his fellow-workers were not by profession engravers of coin-dies, but followers of the arts of painting and sculpture. The art of coin-engraving, which had attained to such perfection in the hands of Greek and even of Roman artists, had during the Middle Ages suffered a terrible eclipse. Artistic portraiture was dead, and even the task of producing mere like-

ness was essayed no longer: the bold relief of Greek coin and Roman medallion was emulated no more, and although in the fourteenth century an ornate and not unpleasing style had begun to

Pisano.

manifest itself on coin-reverses, it never passed the limits of decorative skill.

It was open, of course, to Pisano and his followers to take the processes of die-engraving as they found them-to accomplish what they could within such limitations-to give likeness and life to the conventional heads of the obverse, and employ their taste and invention in improving the defigns of the reverse. Trained, however, in the liberal school of painting and sculpture, they hesitated to pour their new wine into the old bottles. These medallists of the fifteenth century are distinguished above all other medallists by the largeness and freedom of their style; they required a yielding substance to work upon, and a broad fpace wherein to carry out their conceptions. For producing medals of great fize and in high relief, the mechanical processes of dieengraving were at that time quite inadequate; and hence it is that all the early medals, and many of those produced in the fixteenth century, are not struck from dies, but cast from moulds. first Italian medallists made their models from the Casting life in wax-working, in fact, as did the sculptor of bronze who modelled in clay-and from these wax-models they prepared, by a careful and elaborate process, a mould into which the metal was finally poured. To Pisano himself about thirty extant medals have been attributed. diftinguished (as indeed are all the works of the great medallists of Italy) by their splendid portraiture-portraiture of the highest kind, which

not only reproduces faithfully the features of man or woman, but which also reveals character, and which delights especially to show character only in its nobler traits.

The medallic art of Pisano (and in an equal or less degree that of his contemporaries) is further diffinguished by the excellence of its reverse defigns—defigns remarkable for originality, and for strength combined with grace, and which are never chosen at hazard, but selected for their peculiar fitness to adorn the circular field of a As characteristic specimens of Pisano's work, let us mention the two famous medals. "Venator intrepidus" and "Liberalitas augusta," each bearing the head of Alfonso the Magnanimous-"Divus Alphonsus rex triumphator et pacificus"—and having as their reverse types admirable representations of animals: the one a boar-hunt, the other an eagle furrounded by a vulture and other inferior birds of prey. In the representation of animals Pisano took especial delight, and we often find them introduced in the reverses of his medals. As a rule, he does not attempt elaborate allegorical subjects; but his reverses often show some comparatively simple design, taken from ordinary life: thus a medal of his of Sigismondo Pandolfo di Malatesta, which has, as usual, a portrait of the prince for the obverse, shows Malatesta also on its reverse, this time as a full-length figure in armour.

This artist's turn for realism does not, however, preclude the production of several works inspired

by pure poetic fancy. A conspicuous instance of this may be found in the medal which he made for Leonello, Marquess of Este, on the occasion of his marriage in 1444. Just as the poet Spenser, when he wrote the *Protbalamion* of the noble Ladies Somerset—"against their bridal day which



ITALIAN. PORTRAIT OF MALATESTA NOVELLO, BY PISANO.

was not long "—imaged, by a charming yet stately fancy, the subjects of his verse as swans, so the artist Pisano, playing on the name Leonello, portrayed his bridegroom as a lion. A little Cupid or winged genius of marriage stands holding out to the lion an unrolled scroll, whereon in musical characters is displayed the lion's marriage-song.

This defign, which to a reader unacquainted with the original might feem too fanciful, is redeemed from being a mere concetto by the noble figure of the lion and the graceful grouping. Pisano's reverse designs, which shows the same qualities of stately grace and fancy, is that on the medal of Cecilia Gonzaga—"Cicilia virgo filia Johannis Francisci primi marchionis Mantue" -a lady who afterwards became a nun. Cecilia is represented sitting amidst a rocky landscape, with her hand resting on the head of the unicorn who reclines beside her, while above them hangs the crescent moon. But to dwell at length upon the reverses of Pisano's medals, or upon his medallic portraits of "many nobles and personages renowned in arms or distinguished for learning," we should need an entire chapter.

Followers of Pisano.

Matteo Pasti, who worked from 1446, was the first distinguished medallist who followed in the train of Pisano. He, too, was a native of Verona, and probably a pupil of his great fellow-citizen, whose influence on his style is traceable. Sperandio, who worked at the end of the fifteenth century, is also of the school of Vittore. He made numerous medals of the Estes, and of members of the Bentivoglio family, of Pope Julius II., and others. To the fame century belong Giovanni Boldu, Guacciolotti, Enzola, and Melioli, as well as Lixignolo, Pollajuolo, and others, who have left behind them productions of great merit. After the first impulse had been given, the art had, indeed, foon spread to the northern cities of Italy

—to Mantua, Padua, Milan, Brescia, etc.—and, somewhat later, to the cities south of the Apennines.

The Italian medallists of the fixteenth century Sixteenth worthily carry on the work begun by their Medallists. forerunners of the fifteenth. Though with them fomething of the large treatment of the earlier mafters is loft, we find, on the other hand, the greatest variety in the designing of reverses, remarkable skill and delicacy in the execution of details, as well as abundant examples of excellent portraiture. A difference of a technical kind diftinguishes the new medallists from the old; for with the beginning of the fixteenth century there came in the art of striking medals from engraved dies, and though all the medals of larger module continued to be cast till the end of the century, the smaller specimens, which then began to multiply, were struck by the new process. We obferve, indeed, that most of the medallists of the fixteenth century were also goldsmiths or gemengravers, and were thus led naturally to the engraving of dies. To fay even a few words of each of the many remarkable medallists of this century would be impossible here, but the very names of Pomedello and Spinelli, Cellini and Francia, Romano and Caradosso, Valerio Belli, Lione Lioni, Pastorino of Siena, and the rest, are full of charm to every lover of Italian medals. Of these names, we can only select but one or two, referring the reader for more detailed notices to the works of Friedlaender, Armand, Heiss

and others, and to the British Museum Guide to the Italian Medals, by Mr. C. F. Keary.

Francia, who is conspicuous as one of the earliest of this band of medallists, began life, as is well known, as a goldsmith, and acted for some time as director of the mint of Bologna. Vafari has a very interesting passage on his work as a medallift:-" That in which Francia delighted above all else, and in which he was indeed excellent, was in cutting dies for medals; in this he was highly diffinguished, and his works are most admirable, as may be judged from some on which is the head of Pope Julius II .- fo lifelike that these medals will bear comparison with those of He also struck medals of Signor Caradosso. Giovanni Bentivoglio, which feem to be alive, and of a vast number of princes who, passing through Bologna, made a certain delay when he took their portraits in wax: afterwards, having finished the matrices of the dies, he despatched them to their destination, whereby he obtained not only the immortality of fame, but likewise very handsome presents." Medals by Francia of Julius and Bentivoglio may still be seen in the British Museum. The medals of another renowned gold-Benvenuto smith, Benvenuto Cellini, are not very numerous. He was Master of the Mint to Pope Clement VII., for whom he made two portrait-medals.

Cellini.

In connection with portraiture, the name of Pastorino, who died about 1591, is of especial interest, as he devoted himself with ardour almost entirely to this branch of art, and attained in it

wonderful fuccess. The number of his medals is confiderable, for (as Vafari fays of him) "he has copied all the world, and persons of all kinds. great nobles, distinguished artists, and persons of unknown or of low degree." His delicate and beautiful style makes him especially happy in his portraits of women and children. To the reversedefigns of the medals of this century we cannot refer in detail; but we must dwell for a moment upon the reverse of a medal in the British Museum by Annibale Fontana (1540-1587)—a work of Fontana. fingular charm and beauty, though contrasting frongly in its picture-like character with the reverses of the early medallists. It represents Hercules in the Garden of the Hesperides. hero is standing in calm dignity beside the Tree, his right hand outstretched to pluck its golden apples: its dragon guard he has already flain, and is trampling the carcase beneath his feet. In the distance are seen the towers and cities of men in the light of the fetting fun.

It must be added that very few medals in the Italian series commemorate events: their chief strength lies in portraiture, and their interest may portraits. be reckoned rather artistic than historical, although, as has been truly faid, "in this aftonishing feries of portraits the chief actors in the tragedies and comedies of those times pass before us, their characters written in their faces." After the close of the fixteenth century the medals of Italy cease to be of high artistic merit. But we ought not to forget to mention that a continuous

Nicolas V. onwards, is to be found on the medals. Probably the most interesting piece in this class, from an historical point of view, is the famous medal struck by Gregory XIII. to commemorate the Massacre of St. Bartholomew in 1572. specimens of this medal are exhibited in the British Museum; the first in silver, by Federigo Bonzagna, shows as its obverse type the bust of the Pope himself, and on the reverse—tantum religio potuit - is represented the Destroying Angel holding fword and crofs, while around are men and women wounded, or dead, or flying The legend is "Ugonottorum before her. Strages," and the date 1572. A fecond example-

is in bronze, gilt; a third, in bronze and flightly varied, is thought to be of more recent date.

feries of contemporary Papal portraits, from

German Medals.

The Italian Renaissance did not fail to make its influence felt in the medallic art of other European countries, and it was from Italy that Germany derived the practice of casting medals, through Peter Fischer, who had studied art beyond the Alps. But although a foreign importation, the German medal foon acquired a distinct and national character. The minute and patient industry which distinguished German workers in other branches of art displayed itself likewise in their medal-work. Their productions are also thoroughly German in their tendency to avoid idealizing any representation; but if they lack the nobility of the Italian masters, they derive true force and artiflic value from their

of St. Bartholomew.

naïve and vigorous realism. Among German medallists two names are especially conspicuous—one, Heinrich Reitz, the goldsmith of Leipzig, who worked for the Electors of Saxony, and in whose productions has been traced the influence of Lucas Cranach—the other, Friedrich Hagenauer of Augsburg, whose style is of greater simplicity than that of Reitz. The medals executed by the goldsmiths of Nuremburg and Augsburg



GERMAN. PORTRAIT OF J. RINGELBERG.

are extremely numerous; most of them are unfigned, and it is even difficult to separate the productions of the two great centres, though Nuremburg has a distinct superiority, due to the influence of Albert Dürer. Many of the earlier German medals are struck, for the Germans had made considerable improvements in the appliances for striking money: those specimens which are cast have been delicately chased after the casting.

The fixteenth century is the period during which the production of German medals attained its highest degree of excellence. As an original art, it may be said to have perished in the commotions of the Thirty Years' War. Comparatively little attention has been paid to the German series by numismatists and collectors, but it deserves much more than it has yet received.

French Medals.

The medallic art in France had a longer lease of life than in Germany, and its history is of confiderable interest. In spite of a few early native efforts, this art may be faid to have come into existence under the auspices of Italy. Thus we find that the first medal with a French effigy, that of Louis XI., was executed at Aix by an Italian, Francesco Laurana. Another early medal, reprefenting Charles VIII. and Anne of Brittany, cast at Lyons in 1494, was the work of a French goldsmith, Louis le Père, who had been instructed in the medallist's art by Nicolo Spinelli, of Florence. Yet it must be observed that this medal is French rather than Italian in character. and the medals made by native artists under Louis XII., for instance those of Louis and Anne of Brittany (1500), and of Philibert le Beau and Margaret of Austria (1502), are evidence to prove that a purely French school might have maintained itself with very little Italian assistance. Under François I., however, very distinct encouragement is given to Italian artists; and Benvenuto Cellini made for this fovereign a medal with the regal effigy. Another Italian artist of merit,

Giacomo Primavera, also worked for France, and has left medals of Catherine de Medicis, the Duke of Alençon, the poet Ronfard, and others.

The medals of the latter half of the fixteenth century, partly struck and partly cast, are generally unfigned: the feries of large medallions representing Henry II., Catherine de Medicis, Charles IX., and Henry III., has been attributed to Germain Pilon, a medallist who worked for Charles IX. With the accession of Henry IV. begins the fine fuite of medals by Guillaume Dupré, an artist Dupré. whose productions well continued the traditions of the large cast medals of Italy. He worked both under Henry IV. and Louis XIII., and, like the Italian masters of the fifteenth century, undertook, and accomplished with great success, the casting of his own medals. All the more important perfonages among his contemporaries were eager for the privilege of being portrayed by Dupré; and in his medallions, as a French writer has remarked. though with a foupeon of exaggeration, he has left posterity "une galerie iconographique de son temps, dont la beauté et l'interêt égalent ceux des oeuvres analogues de la Renaissance italienne. Personne n'a donné au portrait numismatique un accent plus vivant et plus vrai; personne n'y a mieux rendu la physionomie d'une époque." After Dupré, fine medals still continued to be produced by the two chief French medallists of the seventeenth century-Claude Warin, engraver to The the mint at Lyons, who died in 1654; and Jean Warin, the Engraver-General of Coins, whose death

took place in 1672. The long feries of medals of Louis XIV. is historically interesting, though it too faithfully reflects the pompous and conventional art of his time.

Napoleonic defign.

The first medals of Napoleon, struck between 1796 and 1802, are of indifferent execution and Under the direction of Denon they gradually improved, and at length attained to some degree of artistic merit; the heads of Napoleon by Andrieu and Droz, from the bust by Chaudet, are interesting portraits touched with ideal beauty, and some of the reverses of the Paris mint medals are not inelegant compositions. Perhaps the most historically important medals of the Napoleon feries are those connected with the proposed invasion of England. In May, 1804, Napoleon took the title of Emperor, and in July of the same year he lest Paris to visit the camp of Boulogne and the "Army of England." About this time there was struck a medal which is still extant and not uncommon. Its obverse shows the head of Napoleon, and the reverse a male figure squeezing a leopard between his legs while he throttles it with a cord. legend relates to the flotilla of prames, or flatbottomed boats and gunboats, which was to transport the invading army across the Channel:-"En l'an XII. 2,000 Barques sont construites." The invasion being certain to succeed, nothing further was needed but a commemorative medal. There is reason for believing that in this year a die was actually prepared for a medal recording the fuccess of the invasion to be struck in London

when the army arrived there. No fpecimens Frappee a Londres. struck from this die are now known to be extant, but the British Museum possesses an electrotype which is believed to reproduce the reverse of the original die. Its type and inscriptions have reference to the victorious "Descente en Angleterre." A powerful naked figure has in his grasp a human being whose body ends in a fish's tail. It is the Hercules Napoleon destroying the sea-monster England. In the exergue may be read the modest legend, "Frappée à Londres en 1804." French medal with a fimilar type was really issued two years later, but the "Descente" and "Frappée" legends have disappeared thereon in favour of the consolatory Virgilian quotation: "Toto divisos orbe Britannos."

We have yet to speak of the medals of Holland Dutch and of those of our own country. Both the Dutch and English series, which in the seventeenth century run much into one another, are attractive rather because of their historical interest than by reason of their artistic merit. By historical interest we do not, however, mean to imply that the medals furnish us with any very large amount of information not derivable from the documentary fources, but that they have the property of making hiftorical events more vivid and more easily realized. Though medals can be regarded only as a flight and imperfect index to the history of any notable epoch, yet fomething, at any rate, they do show of its very form and pressure. They are the mirrors which the men of the past delighted to hold up to

every momentous event—or to every event which feemed to them momentous; and they are mirrors, moreover, which have the magic power of ftill retaining the images which they originally reflected.

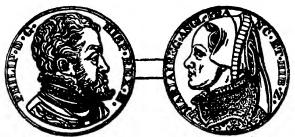
The Dutch medals of the fixteenth century, though not without occasional picturesqueness, are certainly not the finest of their time; they have, however, much historical interest—a feature which they share with those of the succeeding



DUTCH. PORTRAITS OF C. AND J. DE WITT.

century. In point of art the feventeenth-century pieces are poor, and they convey their political allusions by means of elaborate allegory. Many of the portraits on Dutch medals are noteworthy, especially those of William the Silent, Prince Maurice, the De Witts, Van Tromp, and De Ruyter. In the reign of our William the Third, the Dutch series fills up gaps in the English; indeed, several Dutch medallists worked at different periods for English monarchs.

The medallic feries of England opens in the English reign of Henry VIII., and the pieces at first are commemorative chiefly of persons, and not of events. Of Henry himself there exists a bust executed after a portrait of Holbein. Another of Henry's medals proclaims his supremacy over the Church:—"Henricus octavus sidei defensor et in terra Ecclesiae Angliae et Hiberniae sub Christo caput supremum." The King's supremacy was confirmed by Parliament in 1534, though this



ENGLISH. PORTRAITS OF PHILIP AND MARY, BY TREZZO.

medal was not made until 1545. The most interesting portrait medals of this time are those of Anne Boleyn, Thomas Cromwell, and Sir Thomas More. More's medal bears the date 1535—the year of his death—and its reverse typisies him as a cypress-tree which has fallen beneath the stroke of an axe, and derives therefrom a more fragrant odour, "Suavius olet." These early specimens, as well as the portrait medals of Edward VI., are cast and highly chased. Of Mary and her husband we have, besides other representations, admirable half-length figures on a

medal produced at Madrid by the Italian artist Trezzo, while in the service of Philip. This medal is the first signed one in the English series; and the fact that it is executed by a foreign artist is (unfortunately for the artistic credit of England) not to be noted as exceptional, but as the rule; for the history of our English medallists is, as we shall see, to a great extent the history of the medallists of other nations.

Elizabeth.

The reign of Elizabeth, especially, has to show fome excellent portraits by foreign artists. Chief amongst these in beauty and in interest is the medal of Mary Queen of Scots, made and figned by the Italian Primavera, who worked chiefly in the Netherlands, and, as was noted before, in France. Its date is uncertain, but it was probably produced about the same time as the Morton portrait, which was painted in 1 566-67, during Mary's imprisonment in Lochleven Castle. Modern casts of this medal have a reverse added to them, but the original is merely a copper plaque. Stephen of Holland, who lived for a short time in England, executed. chiefly in the year 1562, a number of meritorious portrait-medals (cast and chased), principally, however, of private persons. Personal medals of the more celebrated men of the Elizabethan era are unhappily not very numerous. The less important public medals of this reign may well be passed over in favour of those which commemorate the deseat of the Armada. Several of these pieces, fomewhat varied in their details, are still in existence, and as they are of oval form, and

Armada Medals furnished with ring and chain for suspension, it is probable that they were distributed at the time as It is interesting to note that the decorations. most important do not bear the fignature of any foreign medallist, but are, as it would seem, the work of native artists. Foremost of all the Armada medals must stand the large gold piece with the full-face buft of Elizabeth, encircled by the legend, "Ditior in toto non alter circulus orbe." obverse of this extraordinary medal, with its high relief, its brilliant colour, its almost barbaric profusion of dress and ornament heaped upon the crowned and sceptred Queen, seems to speak the very euphuisin of medallic language, and is wonderfully characteristic of its age. The reverse is conceived in a foberer manner. It represents a baytree standing upright and alone upon an island; its leaf also is not withered, nor has the lightning power to scathe it; for, says the legend, "Non ipfa pericula tangunt." The allusion is, perhaps, not merely to the defeat of the Spaniards, but also to the calm which had followed the political complications of the time-"the Queen of Scots was dead; James of Scotland had been conciliated; France and the Vatican were baffled." Upon another medal of this period, England is reprefented as an ark floating, "faevas tranquilla per undas."

Two other medals of Dutch workmanship, but also referring to the great victory over Spain, have still to be noticed. One of these, which was probably struck by the direction of Prince Maurice, represents the Church standing sirm on a rock amid stormy waves; the other has a quaintly expressed allusion to the confederation formed against Elizabeth by the Pope, the King of Spain, the Emperor, and others. Upon one side are seen the Kings of the earth and the Rulers taking counsel together, but "Blind"—as the Latin superscription warns them—"Blind are the minds of men, yea, and their hearts are blind;" the sloor of their council-chamber is covered with spikes, for "Durum est contra stimulos calcitrare." On the other side, the Spanish sleet is driven on the rocks, and around are the words of the Psalmist, quoted from the Vulgate: "Thou, O Lord, art great, and doest wondrous things; Thou art God alone!"

James I.

The medals of James I. are principally Dutch, and for the most part commemorative of individuals. It should be noticed that several of them are struck from dies, and not cast, for at this period the invention of the screw for striking coins and medals was coming into general use. Mechanical improvements of this kind, though very important to the mint-master, who naturally wishes to turn out his coinage with all possible rapidity and neatness, will be found both in England and other countries to exercise a baneful influence upon the art of medals. hard and machine-made look of the later struck medals too often contrasts unfavourably with the older specimens produced by casting and chasing. To this reign belong the engraved, or, as they should rather be called, the stamped medals of Simon Passe, the clearness and neatness of whose style is very pleasing. Simon, who was the son of Crispin Passe, the artist of Utrecht, resided for about ten years in England, and executed a large number of prints and portraits. His medals are chiefly of James and the royal family. Amongst the sew public events commemorated in this reign are the peace with Spain, concluded in 1604; and the alliance of England, France, and the United Provinces against Spain. Curiously enough, the Gunpowder Plot, which made so deep an impression on the popular mind, is alluded to only on a single medal, and that a Dutch one. This medal shows a snake gliding amongst lilies and roses, and has the legend, "Detectus qui latuit."

The most noteworthy medals of the early part of the reign of Charles I. are those by Nicholas Briot, Charles I. who, after being chief engraver to the Paris mint, came to England and executed a number of dies and moulds for medals as well as dies for the English coinage. With the outbreak of the Civil Wars there begins in England a period of exceptional medallic interest. During the lifetime of the King, and under the Protector and Commonwealth, medals continued to be made in extraordinary numbers. Some of these record the successes of the contending parties, but most of them are what are called "badges"—medals, that is to fay, of oval form, furnished with a ring for suspension, so that they could be worn by partifans of either fide. When we reflect that these pieces were once worn by the actors in that memorable drama, they can

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hardly fail to awaken a peculiarly pathetic interest;

and this interest is much enhanced by their frequently prefenting the portraits of the remarkable men of the time. Among the portraits appearing on badges, or on other medals, are those of Essex, Fairfax, Waller, Laud, Strafford, and many others. A portrait of Hampden exists on a small engraved plate, but it is probably of eighteenth-century work. Of Cromwell and his family there are a confiderable number of medals, as well as of men conspicuous among the opponents of the King, fuch as Ireton, Lilburne, Lambert, and Thurloe. The battle of Dunbar is commemorated by a medal showing on its obverse a bust of Cromwell in armour, and, in the distance, the battle itself, with the inscription, "The Lord of Hosts-[watch-]word at Dunbar, Septem. v. 3, 1650." The reverse displays the Parliament assembled in one House with the Speaker. To the time of the Commonwealth also belong several "Naval Rewards" (1650-1653), especially the fine medals struck by the Parliament in commemoration of Blake's victories over the Dutch, and distributed to various officers. A special medal records the faving of the Triumph, Blake's flag-ship: "For eminent fervice in faving y. Triumph, fiered in fight wh. y. Duch in July, 1658." Another medal of this time has engraved upon it an English legend which has a quaint Latin ring about it: "Robt. Blake. Born 1598. Died 1657. He fought at once with Ships and Castles. He dared the Fury of all the

Elements, and left an Example to Posterity which

is incredible; to be imitated."

Commonwealth.

Blake Medals.

The continuous and eager demand for medallic badges and memorials at the epoch of the Civil Wars was fortunately well responded to by three artists of merit. Two of these, the brothers Thomas and Abraham Simon, who employed The Simons. their talents on the Parliamentary side, have produced some of the most praiseworthy works in the English series: their place of birth is uncertain, but they may, perhaps, be claimed as Englishmen. Thomas is especially well known, from his connection with the English mint. He it was who made the splendid coins with the effigy of the Protector, and the famous "Petition Crown" for Charles II. The two brothers produced medals fingly or together: in the case of a joint work, it feems that Abraham Simon made the model, while Thomas, a more skilful engraver, did the after-chasing. The Simons appear to have first made their models in wax, and then to have cast the medals from moulds in sand. Most of the medals of Charles I. and the Commonwealth are cast and chased. Thomas Rawlins, the medallist Rawlins. who worked for the King, and who, after the death of Charles, prepared feveral commemorative medals for the adherents to the royal cause, cannot be fpoken of fo favourably as the Simons. work was above the average, but it failed to attain the sharpness and high finish which characterize that of his two rivals." These three artists continued to work after the Restoration; but the chief medallist under Charles II. was John Roettier, the fon of a native of Antwerp. His medals,

which are always struck, are sharply cut, and show good portraits as well as some picturesque reverse designs. Another medallist who worked in Roettier's style, though with inferior skill, was George Bower, or Bowers. Both Roettier and Bower continued to produce medals under James II. and, for a time, under William III.

An abundance of loyal medals heralds and in-

just rising from the sea—the leastess branch soon to recover greenness—the Jupiter destroying the

Charles II augurates the Restoration. Charles is the fun

proftrate giants. Many royalist badges, with the effigies of the King and his father, probably belong to this time: one interesting medal was doubtless bestowed upon some faithful follower. of Charles, for it bears the royal head, and is inscribed with the words, "Propter strenuitatem et fidelitatem rebus in adversis." The important engagements between the naval powers of England and Holland receive due illustration from medals -English, Dutch, and French. The Popish Plot, and especially one incident—the murder of Sir Edmund Berry Godfrey—have left curious medallic evidences of themselves. The medals relating to Godfrey all contain some satire upon the Jesuits. On one remarkable specimen in pewter, two monks, styled "Justice-killers to his Holiness," may be feen strangling Godfrey, overlooked by the Pope, who is himself prompted by the devil. This is "Rome's revenge, or Sr. Edmvndberry Godfrey mvrthered in the pope's flaughter-hovs." One

other medal of this reign-that struck by Bower

Popish Plot. to celebrate the acquittal of Shaftesbury on the charge of high treason—ought not to be here omitted. Its obverse has a portrait of the Earl, and the reverse is a view of London, with the sun appearing from behind a cloud; the legend being "Laetamur: 24 Nov., 1681." This is the piece alluded to with so much bitterness in Dryden's satire called The Medal:

"Five days he sate for every cast and look, Four more than God to finish Adam took; But who can tell what essence angels are, Or how long Heaven was making Lucifer."

The reign of James II., though brief, has left James II. its traces on a confiderable number of medals. Many of these are Dutch, but they are perhaps more full of interest than the official English The Rebellion of Monmouth is recorded on feveral specimens. One, by the Dutch artist Ian Smeltzing, bearing on the obverse the head of the Duke ("Jacobus infelix Dux Monumethensis"), has a reverse of unusual power—the ghaftly decapitated head of the ill-fated leader lying upon the ground, and spouting blood-"Hunc sanguinem libo Deo Liberatori." The attempt of James to restore Catholicism by the repeal of the Test Act, and the Trial of the Seven Bishops, receive full illustration, especially the latter event. One well-known medal gives portraits of Archbishop Sancroft and the Bishops; another, showing feven stars in the midst of the starry heavens, likens the feven prelates to the "fweet influences" of the Pleiades - "Quis restringet Pleiadum

delicias." On yet another specimen, also bearing medallions of the Bishops, a Jesuit and monk are feen vainly endeavouring to undermine the Church, a visible edifice built on a rock, and supported by a hand from Heaven-" The Gates of Hell shall not prevaile!" The other medals of this reign refer chiefly to the flight and abdication of the King, and to the birth of the young prince James. Some of the Dutch medals make very broad hints as to the legitimacy of the youthful heir. On one curious specimen Truth is feen throwing open the door of a cabinet, within which stands a Jesuit, thrusting through a trap a child with pyx and crown. The name of this supposititious child whom Father Petre or fome other papist is thus introducing to the world is inscribed on the cabinet door-" acobus Francis Edwardus."

Pretender Medals. The Flight of James to France conducts us naturally to the medals of the Stuart family, of whose members there are several memorials of this kind: many of them, no doubt, were struck for presentation to the faithful adherents who visited the princes in exile, or were issued to awaken interest in the Jacobite cause. One very pleasing medal of this series represents the youthful Charles Edward and his brother Henry; before Prince Charles is seen a star, with the motto "Micat inter omnes." Another medal—clearly, however, not issued by the Stuarts—ridicules the two attempts of the Elder Pretender to recover the English throne in 1708 and 1716; a map of

Great Britain and Ireland, with ships at sea, is displayed, with the dates of the expeditions, and the legend "Bis venit, vidit, non vicit, flensque recessit." A very interesting evidence of the still pieces. unfurrendered "right divine" is to be found in the touch-pieces of the Stuart family. Previous to the reign of Charles II., the English sovereigns who touched for the cure of the scrofula or "King's evil," distributed to their patients the current gold coin, called the angel. Charles II., who exerted his healing powers for an enormous number of persons, and under James II., a medalet having types fomewhat fimilar to those of the angel was substituted, and hung round the neck of each afflicted person by a white ribbon. The Elder Pretender claimed the power as well as his two fons Charles and Henry, and of all three, touch-pieces are still extant, Henry's bearing the style of Henry IX. The practice of touching was repudiated by William III., and finally abandoned by George I. Between these reigns, however, Anne had been willing to difpense the royal gift of healing, and one child whom she touched (unhappily without refult) was Samuel Johnson, whose golden touch-piece, pierced with a hole for fuspension, may still be seen in the British Museum. Boswell records that when, on one occasion, Dr. Johnson was asked if he could remember Queen Anne, he answered that he had "a confused, but fomehow a folemn, recollection of a lady in diamonds and a long black hood."

The medallic feries of William III. and Anne

and Mary.

is due to the efforts of Dutch artists, the most active of whom were the Smeltzings, Luder, Hautsch, Boskam, and Croker. Their medals are in many respects similar to those of John Roettier, but in lower relief; the reverses are generally pictorial and full of minute detail, which is not always ineffective, though their art on the whole is decidedly poor and conventional. medals of William and Anne form the completest fuite in the English feries; any attempt, indeed, to give a detailed reference to the events which they commemorate would amount to a repetition of nearly all the best-known events in English history, from the Battle of the Boyne to the Peace of Utrecht. This continuous record is far less fatisfactorily kept on the accession of George I. At that time there were few medallists in England, and the Dutch no longer worked for us. The medals of his fuccessor are, however, commemorative of feveral important events, especially of those connected with the War of the Austrian Succession. the Jacobite Rebellion of '45, and the Conquest George III. of Canada. The long reign of George III. is very fertile in medals, of which a good typical felection, down to the Battle of Waterloo, may be feen in the public exhibition galleries of the British Museum. The greater portion of the medals of this period which are there exhibited relate to "the struggles of England with her American colonists, and to the subsequent wars with France, Spain, and Holland by fea and land. Following

these are several pieces commemorating some of

the battles of the Peninsular War, and bearing portraits of the principal generals, and a few personal medals of statesmen and others."

Some remarks must be made on the interesting Military and Naval class of English Military and Naval medals. Medals. The Armada medals already mentioned may be regarded as the earliest of the class, though it is not known that they were issued by authority. In 1643 Charles I. granted medals to foldiers who distinguished themselves in Forlorn Hopes, and many of the Royalist and Parliamentary "badges" were doubtless intended as military rewards. Under the Commonwealth were distributed the Dunbar medal, and those for Blake's victories over the Dutch, to which we have already alluded. After the Restoration, military awards were occasionally issued, though the first decorative medal, subsequent to the Commonwealth, having a ring for suspension, seems to be that for the battle of Culloden.

"Again a long period elapses during which no decorative medals appear; and the victories of the Nile and Trafalgar would have remained unrewarded, but for the munificence and patriotism of two Englishmen, Alexander Davison and Matthew Boulton. In 1784 the East India Com-Indian pany acknowledged the fervices of its troops by awarding a medal for the campaign in the West of India, an example which originated a custom; and from that time, as long as India remained under the control of the Company, medals were awarded for all subsequent wars. The first medal

issued by authority in England in this century, is that given for the Battle of Waterloo. conferred, by order of the Prince Regent, upon every officer and private present at that battle; but no acknowledgment was made of all the brilliant engagements in the Peninsular War till 1847, when a medal was issued for military services between the years 1793-1814. At the same time a corresponding medal for naval fervices was ordered to be struck for all naval engagements during the same period. Since the accession of her Majesty, medals have been awarded for every campaign, as well as others for 'meritorious fervice,' 'long fervice,' etc. Befides the medals issued by the authority of the Crown and those of the East India Company, there are a number of Regimental medals. These were struck at the expense of the officers of the regiments, for distribution among those who served under them; but this custom ceased when a public acknowledgment was made of the services of the army."1

Art.

The unfatisfactory condition of the medallic Condition of Medallic art in England—and, indeed, in other European countries—during the present century has been justly lamented; and its productions must too often seem to those acquainted with the best efforts of Greek engravers and Italian medallists to be almost beneath contempt, and beyond the power of criticism to amend. To entertain a very fanguine expectation as to the future of this interesting branch of art would, perhaps, be some-

¹ H. A. Grueber, Brit. Mus. Guide to Eng. Med., p. xv.

what rash; but there is certainly no real ground for denying the possibility of reinstating it in fomething of its pristine glory. If England cannot at once produce a school of medallists worthy to rank with the Italians of the fifteenth and the fixteenth centuries, her artists may at least begin by shaking themselves free from the trammels in which they have moved fo long and fo painfully. And, first, there is certainly needed a reform in the prefent rapid but deadly mechanical processes of producing medals: the old Italian casting and modelling in wax-the old Greek method of striking with the hammer on "blanks" not uniformly flat, must reassert their superiorityespecially in the case of medallic portraiture. create original artists—to breathe a new spirit into medal defigns—particularly the reverse defigns—is, indeed, a far more difficult task; yet at least it is possible to abandon in part, if not entirely, that classicism, or rather pseudo-classicism, which so long has reigned supreme. To press the inhabitants Classical of Olympus into the service of modern art—to employ the symbolism of that Pagan creed outworn to commemorate a Methodist Conference or a Medical Congress, is in itself a confession of weakness; and though a few artists, such as the Wyons, may in a few instances claim to have im-The parted congruity and gracefulness to their classical Wyons. designs, yet in the majority of modern medals these two essential qualities are suggested only by their absence. Modern students of art, and even the ordinary English public, have begun to display an

increasing desire to know and enjoy the remains of classic Art, but it is to the fountain-head that they rightly turn—to Hellas, and not to Rome. useless, therefore, at this time of day, for a medallist to hope to conjure with mythological puppets of Hercules and Mars, and well-nigh impossible for him to awaken by classic emblem and divinity the fympathies of an audience for whom the wings of Victory have long lost all their swiftness, and the steeds of Neptune all their animation. Yet it must be observed that already there are signs of better things. Among the medals exhibited to the public at the British Museum will be noticed a feries by Professor Legros of large portrait medallions of several eminent Englishmen-Carlyle, Tennyson, Gladstone, and others-which have been in the first instance modelled in wax, and then transferred to metal by casting. new departure in medallic portraiture is very interesting, and the boldness of style in the medals in question is worthy of praise; but it must be remarked that the heads are treated sketchily, and seem to have little or no affinity to the material in which they are wrought. Italian artists, on the contrary, even when working in their boldest and largest style, were never sketchy, but paid attention to finish, especially in the details of the hair and eyes, and even in fuch a minor matter as the lettering of the legend. Profesfor Legros has not at present essayed what is, perhaps, the still more arduous task of producing original defigns fuitable for the reverses

Legros.

of medals. In the reverse of the Ashantee War medal, defigned by Mr. Poynter, we must admire Poynter. the originality which makes itself independent of the conventional classic reverles—here, at last, we have real negroes, and real English soldiers in their helmets, introduced in a scene which is in itself a genuine artistic expression of the event intended to be commemorated by the medal. Yet even here it must be objected that the artist shows the want of a familiar and practical acquaintance with the material in which his ideas are expressed; and his design, though it would probably expand into an excellent painting, is far too confusedly picturesque for the limits of a fmall medal, and as a reverse-design cannot therefore be pronounced successful.





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